

HC100™
Wristband Printer

Maintenance Manual

© 2008 ZIH Corp. The copyrights in this manual and the software and/or firmware in the label printer described therein are owned by ZIH Corp. Unauthorized reproduction of this manual or the software and/or firmware in the label printer may result in imprisonment of up to one year and fines of up to \$10,000 (17 U.S.C.506). Copyright violators may be subject to civil liability.

This product may contain ZPL® , ZPL II® , and ZebraLink™ programs; Element Energy Equalizer® Circuit; E³®; and Monotype Imaging fonts. Software © ZIH Corp. All rights reserved worldwide.

ZebraLink and all product names and numbers are trademarks, and Zebra, the Zebra logo, ZPL, ZPL II, Element Energy Equalizer Circuit, and E³ Circuit are registered trademarks of ZIH Corp. All rights reserved worldwide.

All other brand names, product names, or trademarks belong to their respective holders. For additional trademark information, please see "Trademarks" on the product CD.

Proprietary Statement This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies Corporation.

Product Improvements Continuous improvement of products is a policy of Zebra Technologies Corporation. All specifications and designs are subject to change without notice.

Liability Disclaimer Zebra Technologies Corporation takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies Corporation reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability In no event shall Zebra Technologies Corporation or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies Corporation has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Contents



About This Document	7
Who Should Use This Document	8
How This Document Is Organized	8
Contacts	9
Web Site	9
The Americas	9
Europe, Africa, Middle East, and India	9
Asia Pacific	9
Document Conventions	10
Related Documents	12
1 • Introduction	13
Overview	14
2 • Master Assembly Drawing	15
Master Assembly Drawing	16
Maintenance Kits	16

3 • Maintenance Kits	19
61330M Printhead Assembly Maintenance Kit	20
Prepare for Installation	20
Remove the Media Cartridge	21
Open the Printer	23
Remove the Printhead Assembly	25
Install the New Printhead Assembly	28
Resume Operation	29
61331M Platen Roller Assembly Maintenance Kit	30
Prepare for Installation	30
Remove the Media Cartridge	31
Open the Printer	33
Reposition the Printhead Assembly	35
Remove the Platen Roller	37
Install the New Platen Roller	38
Resume Operation	39
61335M Main Logic Board Maintenance Kit	40
Prepare for Installation	40
Remove the Media Cartridge	41
Open the Printer	43
Remove the Outer Enclosure and Trim	45
Remove the Old Main Logic Board (MLB)	48
Install the New MLB	55
Reinstall the Outer Enclosure and Trim	57
Resume Printer Operation	58
61337M ZebraNet™ Internal Wireless Plus Print Server Assembly Kit	59
Prepare for Installation	59
Remove the Media Cartridge	61
Open the Printer	63
Remove the Outer Enclosure and Trim	65
Remove the Main Frame and the Main Logic Board (MLB)	68
Remove the Wireless Radio Board	72
Install the New Wireless Board	73
Reinstall the MLB	73
Reinstall the Main Frame Assembly	74
Reinstall the Outer Enclosure and Trim	75
Resume Printer Operation	76

61338M ZebraNet™ 10/100 Print Server Assembly Maintenance Kit	77
Prepare for Installation	77
Remove the Media Cartridge	78
Open the Printer	80
Remove the Outer Enclosure and Trim	82
Access the Main Frame Assembly	85
Install the New 10/100 Print Server Board	87
Reinstall the Outer Enclosure and Trim	87
Resume Printer Operation	87
61339M Smart Card Reader Board Maintenance Kit	88
Prepare for Installation	88
Remove the Media Cartridge	89
Open the Printer	91
Remove the Outer Enclosure and Trim	93
Remove the Old Smart Card Reader	96
Install the New Smart Card Reader	97
Reinstall the Outer Enclosure	97
Resume Printer Operation	98
61340M Upper Print Mechanism Cover Assembly Maintenance Kit	99
Prepare for Installation	99
Remove the Media Cartridge	101
Open the Printer	103
Remove the Outer Enclosure and Trim	105
Remove the Upper Print Mechanism Cover	108
Install the New Upper Print Mechanism Cover	110
Reinstall the Outer Enclosure and Trim	111
Resume Printer Operation	111
61341M Print Mechanism Chassis Assembly Maintenance Kit	112
Prepare for Installation	113
Remove the Media Cartridge	115
Open the Printer	117
Remove the Outer Enclosure and Trim	119
Remove the Upper Print Mechanism Cover	122
Remove the Print Mechanism Assembly	123
Install the New Print Mechanism Assembly	125
Reinstall the Upper Print Mechanism Cover	127
Reinstall the Outer Enclosure and Trim	128
Resume Printer Operation	128

61342M Main Frame Assembly Kit	129
Prepare for Installation	129
Remove the Media Cartridge	131
Open the Printer	133
Remove the Outer Enclosure and Trim	135
Remove the Main Frame and the Main Logic Board (MLB)	138
Remove the Upper Print Mechanism Cover	142
Remove the Print Mechanism Assembly	143
Remove the Smart Card Reader	144
Reinstall the MLB	146
Reinstall the Smart Card Reader	147
Reinstall the Main Frame Assembly	149
Reinstall the Upper Print Mechanism Cover	150
Resume Printer Operation	151
61343M Outer Enclosure and Trim Maintenance Kit	152
Prepare for Installation	152
Remove the Media Cartridge	154
Open the Printer	156
Remove the Outer Enclosure and Trim	158
Reinstall the Outer Enclosure and Trim	161
Resume Printer Operation	161

About This Document



This section provides you with contact information, document structure and organization, and additional reference documents.

Contents

Who Should Use This Document.....	8
How This Document Is Organized.....	8
Contacts.....	9
Document Conventions	10
Related Documents	12

Who Should Use This Document

This Maintenance Manual helps you quickly identify and maintain assemblies in the HC100.

How This Document Is Organized

The Maintenance Manual is set up as follows:

Section	Description
Technical Support	How to contact technical support.
Introduction	An introduction to the HC100.
Master Assembly Drawing	Identifies the assemblies and part names and kit numbers.
Installation Instructions	How to install replacement parts (also known as maintenance kits).

Contacts

You can contact Zebra Technologies Corporation at the following:

Web Site

<http://www.zebra.com>

Technical Support via the Internet is available 24 hours per day, 365 days per year. Go to <http://www.zebra.com/support>.

The Americas

Regional Headquarters	Technical Support	Customer Service Dept.
Zebra Technologies International, LLC 333 Corporate Woods Parkway Vernon Hills, Illinois 60061.3109 U.S.A T: +1 847 793 2600 Toll-free +1 800 423 0422 F: +1 847 913 8766	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 913 2578 Hardware: ts1@zebra.com Software: ts3@zebra.com	For printers, parts, media, and ribbon, please call your distributor, or contact us. T: +1 877 ASK ZEBRA (275 9327) E: clientcare@zebra.com

Europe, Africa, Middle East, and India

Regional Headquarters	Technical Support	Internal Sales Dept.
Zebra Technologies Europe Limited Zebra House The Valley Centre, Gordon Road High Wycombe Buckinghamshire, HP13 6EQ, UK T: +44 (0)1494 472872 F: +44 (0) 1494 450103	T: +44 (0) 1494 768298 F: +44 (0) 1494 768210 Germany: Tsgermany@zebra.com France: Tsfrance@zebra.com Spain/Portugal: Tsspain@zebra.com All other areas: Tseurope@zebra.com	For printers, parts, media, and ribbon, please call your distributor, or contact us. T: +44 (0) 1494 768316 F: +44 (0) 1494 768244 E: cseurope@zebra.com

Asia Pacific

Regional Headquarters	Technical Support	Customer Service
Zebra Technologies Asia Pacific, LLC 120 Robinson Road #06-01 Parakou Building Singapore 068913 T: +65 6858 0722 F: +65 6885 0838	T: +65 6858 0722 F: +65 6885 0838 E: tschina@zebra.com All other areas: tsasiapacific@zebra.com	For printers, parts, media, and ribbon, please call your distributor, or contact us. T: +65 6858 0722 F: +65 6885 0836

Document Conventions

The following conventions are used throughout this document to convey certain information.

Alternate Color (online only) Cross-references contain hot links to other sections in this guide. If you are viewing this guide online in .pdf format, you can click the cross-reference (blue text) to jump directly to its location.

LCD Display Examples Text from a printer's Liquid Crystal Display (LCD) appears in **Bubbledot ICG** font.

Icons Used



Caution • Warns you of the potential for electrostatic discharge.



Caution • Warns you of a potential electric shock situation.



Caution • Warns you of a situation where excessive heat could cause a burn.



Caution • Advises you that failure to take or avoid a specific action could result in physical harm to you.

Caution • (No icon) Advises you that failure to take or avoid a specific action could result in physical harm to the hardware.



Important • Advises you of information that is essential to complete a task.



Note • Indicates neutral or positive information that emphasizes or supplements important points of the main text.



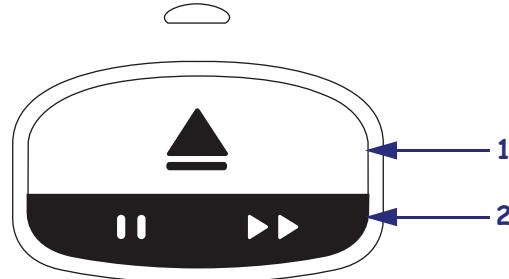
Example • Provides an example, often a scenario, to better clarify a section of text.



Tools • Tells you what tools you need to complete a given task.

Illustration Callouts Callouts are used when an illustration contains information that needs to be labeled and described. A table that contains the labels and descriptions follows the graphic. [Figure 1](#) provides an example.

Figure 1 • Sample Figure with Callouts



1	Eject button
2	Pause/Feed button

Related Documents

The following documents might be helpful references:

Applicable Zebra Printer User Guide

ZPL II® Programming Guide

ZebraNet® 10/100 Internal Print Server User Guide

ZebraNet® Wireless User Guide

Introduction



This chapter gives a brief overview of the HC100.

Contents

Overview	14
----------------	----

Overview

The HC100 prints patient identification wristbands for use in hospitals, clinics, and other healthcare facilities. The printer uses an enclosed media cartridge to deliver the wristbands and even tracks the remaining number of wristbands inside the cartridge. Wristbands are available in multiple sizes including adult, child, and infant. The HC100 is self-calibrating and simple to use.

This manual may be used as a reference for maintaining the HC100 printers. The manual includes installation instructions for all of the maintenance kits as well as assembly drawings, parts lists, and required tools.



Master Assembly Drawing

This chapter provides the master assembly drawing for all maintenance kits for the HC100.

Contents

Master Assembly Drawing	16
Maintenance Kits	16

Master Assembly Drawing

All information provided in [Table 1](#) corresponds to the numbers shown in [Figure 2](#). For example, arrow 8 in the drawing is identifying the Main Logic Board assembly. According to [Table 1](#), Item 8 gives both, the name and the part number, for the kit assembly.

Maintenance Kits

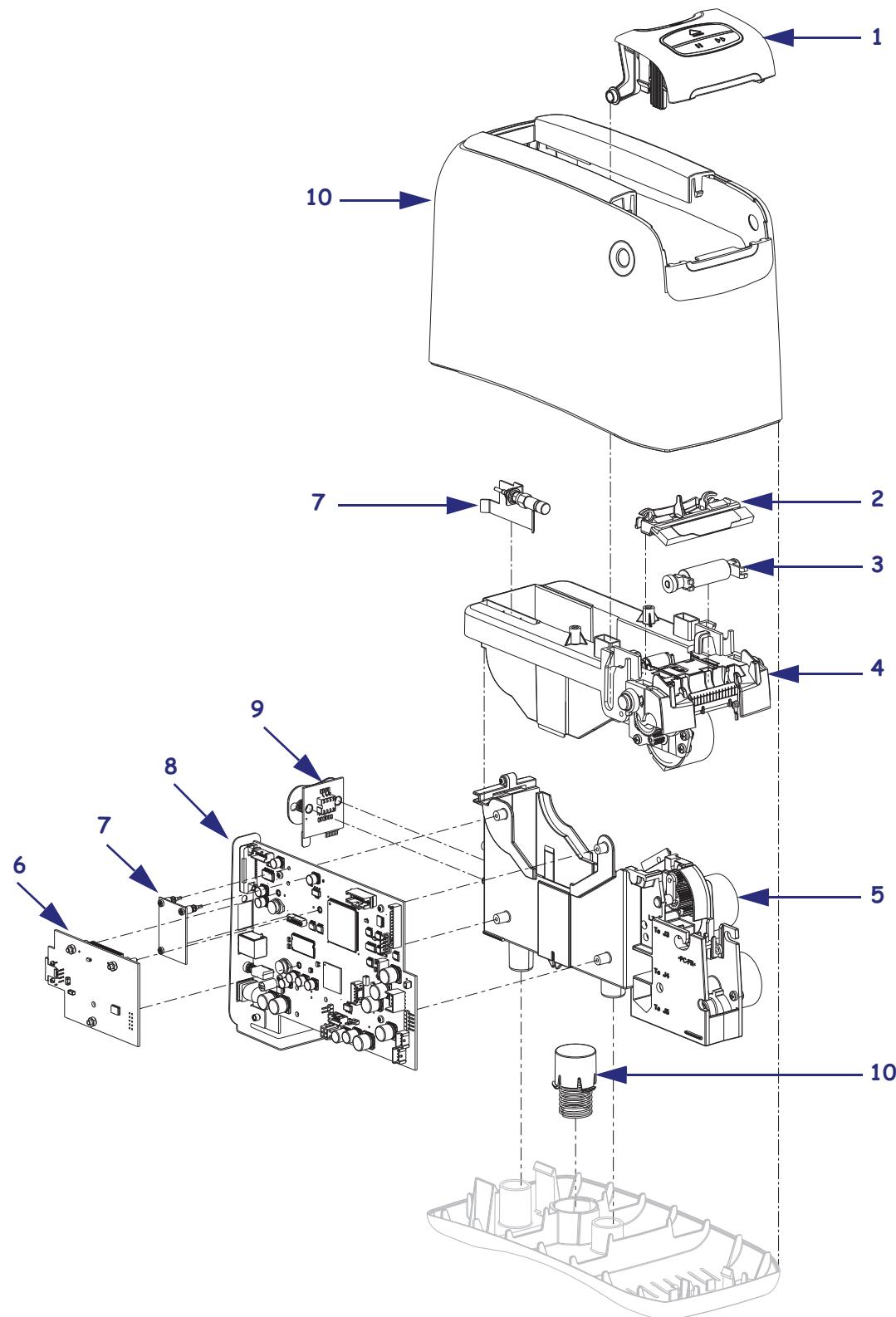
Table 1 • Master Assembly Kits

Item	Kit Part Number	Assembly Name
1	61340M	61340M Upper Print Mechanism Cover Assembly Maintenance Kit on page 99
2	61330M	61330M Printhead Assembly Maintenance Kit on page 20
3	61331M	61331M Platen Roller Assembly Maintenance Kit on page 30
4	61341M	61341M Print Mechanism Chassis Assembly Maintenance Kit on page 112
5	61342M	61342M Main Frame Assembly Kit on page 129
6	61338M	61338M ZebraNet™ 10/100 Print Server Assembly Maintenance Kit on page 77
7	61337M	61337M ZebraNet™ Internal Wireless Plus Print Server Assembly Kit on page 59
8	61335M	61335M Main Logic Board Maintenance Kit on page 40
	61336M	
9	61339M	61339M Smart Card Reader Board Maintenance Kit on page 88
10	61343M	61343M Outer Enclosure and Trim Maintenance Kit on page 152



Important • The printer base is not included in any kit and thus, appears gray in [Figure 2](#).

Figure 2 • Master Assembly Drawing







Maintenance Kits

This chapter provides the installation instructions, parts lists, and required tools for all of the maintenance kits for the HC100.

Contents

61330M Printhead Assembly Maintenance Kit	20
61331M Platen Roller Assembly Maintenance Kit	30
61335M Main Logic Board Maintenance Kit	40
61337M ZebraNet™ Internal Wireless Plus Print Server Assembly Kit	59
61338M ZebraNet™ 10/100 Print Server Assembly Maintenance Kit	77
61339M Smart Card Reader Board Maintenance Kit	88
61340M Upper Print Mechanism Cover Assembly Maintenance Kit	99
61341M Print Mechanism Chassis Assembly Maintenance Kit	112
61342M Main Frame Assembly Kit	129
61343M Outer Enclosure and Trim Maintenance Kit	152

61330M Printhead Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the printhead assembly in the HC100™. Read these instructions thoroughly before installing this kit.

Prepare for Installation

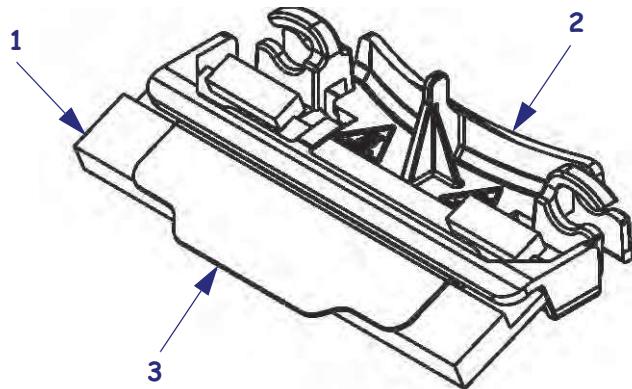
Parts List

Before proceeding, verify that your kit contains the items for your printer listed below.

✓	Item	Qty	Part Number	Description
	Ref	1	61330M	2 in. Thermal Printhead Maintenance Kit
		1	<i>61259-12</i>	2 in. Thermal Printhead
	2	1	<i>61248</i>	Media Chute
	3	1	<i>61230</i>	Printhead Lever Plate

Bold = Part available for purchase.
Italic = Part not available for purchase; listed and shown for reference only.

Figure 3 • Kit Contents



Tools Required



Tools • You need these tools to complete this procedure:

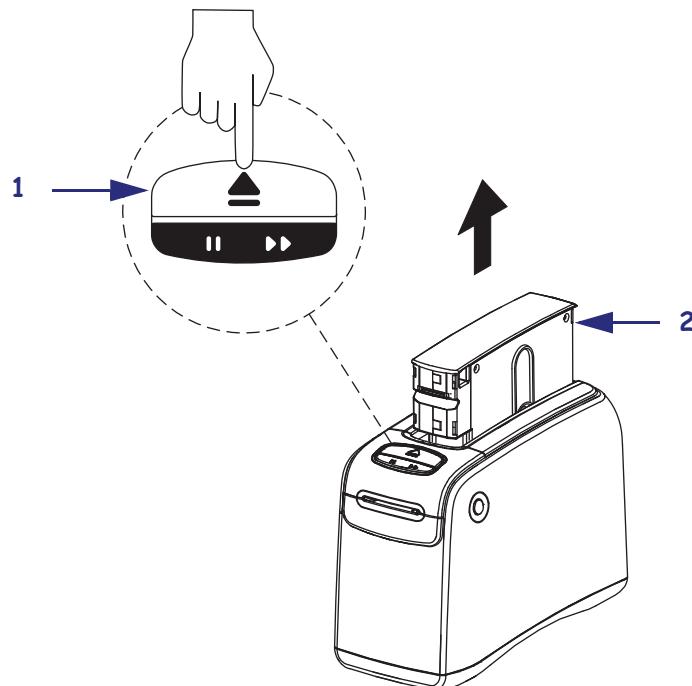
Antistatic Wriststrap and Mat 47362* Zebra Preventive Maintenance Kit

* In place of the Preventive Maintenance Kit, you may use a clean swab dipped in a solution of isopropyl alcohol (minimum 90%) and deionized water (maximum 10%).

Remove the Media Cartridge

1. See [Figure 4](#). Press Eject and remove the media cartridge.

Figure 4 • Media Cartridge, Eject Button, and HC100



1	Eject button
2	Media cartridge

2. Did the cartridge eject?

If...	Then...
Yes	<ol style="list-style-type: none">Remove the media cartridge and set aside.Go to Open the Printer on page 23.
No	<ol style="list-style-type: none">Turn off (O) the power switch.Turn on (I) the power and wait for the printer to power up completely.Press Eject.Continue with step 3.

3. Did the cartridge eject this time?

If...	Then...
Yes	<ul style="list-style-type: none">a. Remove the media cartridge and set aside.b. Go to Open the Printer.
No	<ul style="list-style-type: none">a. Turn off (O) the power switch.b. Turn on (I) the power and wait for the printer to power up completely.c. Press and hold Eject for six seconds.d. Release Eject.e. If the cartridge ejected, go to Open the Printer.f. If the cartridge did not eject, continue with step 4.

4. Contact Technical Support. See *Contacts* on page 9.

Open the Printer



1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

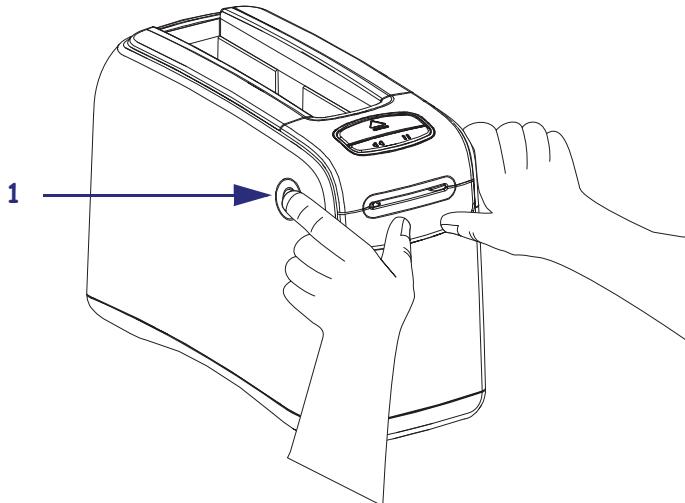


2. Place the printer on the antistatic mat.
3. **Caution** • Turn off (O) the printer before performing the following procedure.

Turn off (O) the printer.

4. See [Figure 5](#). Press the upper cover release buttons located on both sides of the printer.

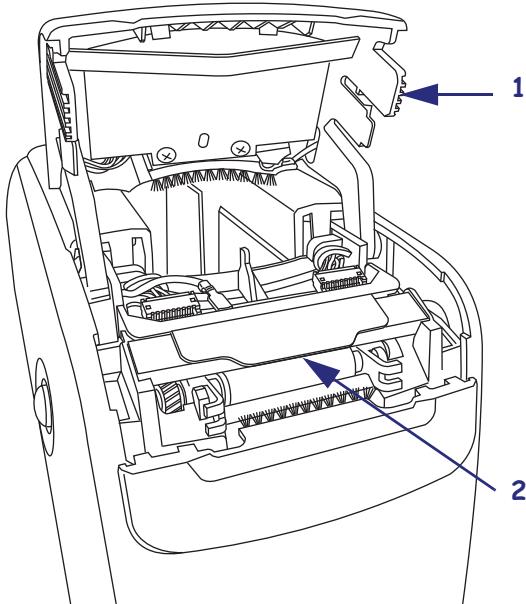
Figure 5 • Opening the HC100



1 | Upper cover release button (one on each side)

5. See [Figure 6](#). Raise the cover up and tilt it toward the back until it is almost resting on the top of the printer.

Figure 6 • HC100 with Cover Open



1	Upper cover
2	Metal printhead lever plate

Remove the Printhead Assembly



Caution • Before touching the printhead assembly, discharge any built-up static electricity by touching the metal back plate on the printer near the On/Off switch or by using an antistatic wriststrap and mat.

Caution • Be careful not to touch the printhead with any tools. This could damage the printhead.



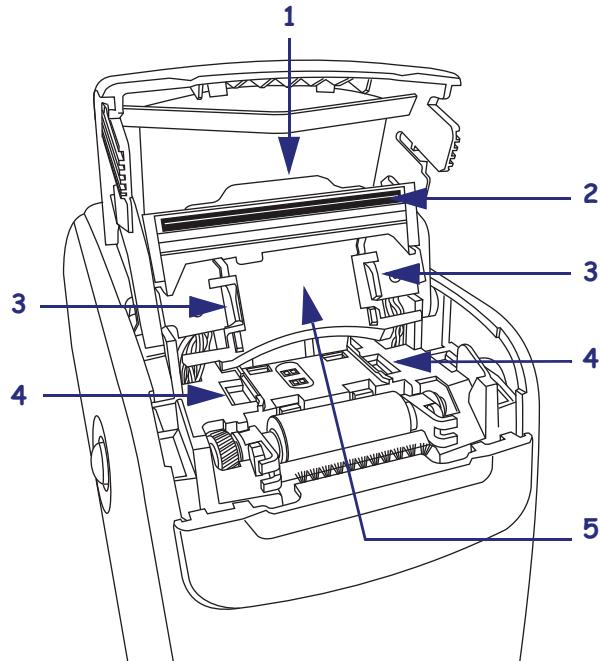
Caution • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

1. **Caution** • While performing any tasks near an open printhead, remove all rings, watches, hanging necklaces, identification badges, or other metallic objects that could touch the printhead.

See [Figure 6](#). To release the printhead assembly, lift up on the metal printhead lever plate along the front edge of the printhead assembly.

2. See [Figure 7](#). Lift the printhead assembly up and pull it forward ensuring the snap tabs underneath the printhead assembly are disengaged from the printer.

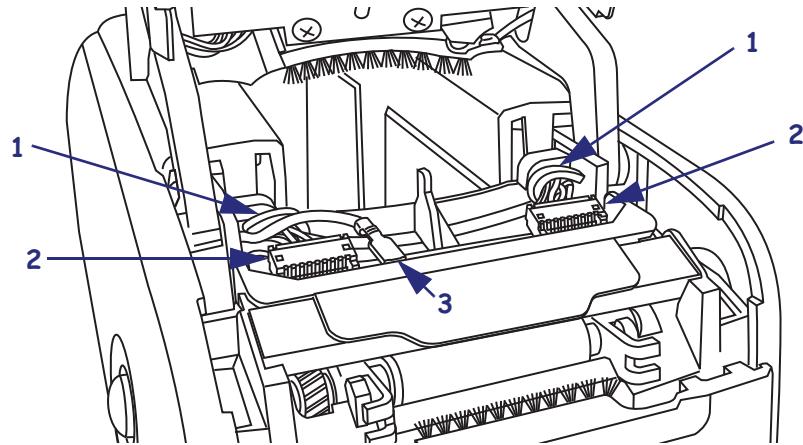
Figure 7 • Close-up of Printhead Assembly Parts



1	Metal printhead lever plate
2	Underside of printhead assembly
3	Snap tabs (2)
4	Chassis slots (2)
5	Media chute

3. See [Figure 8](#). Gently remove all of the wires from the cable clips located at the back outside edges of the printhead assembly.

Figure 8 • Close-Up View of Printhead Assembly



1	Cable clips (2)
2	Printhead assembly socket and connector (2)
3	Ground wire (green)

4. Disconnect the right and left printhead cables.
 - a. Slide a fingernail between the back edge of the socket and the connector to gently pry each side of the connector out.
 - b. Grasp the connector and pull it completely out of the socket.
 - c. Repeat [step 4](#) for the other cable.
5. Disconnect the small green ground wire from the printhead.
6. Remove the printhead assembly and discard.

Install the New Printhead Assembly

Caution • Remove all jewelry that could come into contact with the printhead or other printer parts.

1. See [Figure 8](#). Reconnect the right and left printhead cables.
 - a. Support the front edge of the socket with your fingernail.
 - b. Align the connector with the socket.
 - c. Gently pinch the connector and socket together.
 - d. Repeat [step 1](#) for the other cable.
2. Thread the cable wires through the cable clip on each side of the printhead assembly.
Be sure to include the green ground wire in the cable clip on the left side of the printhead.
3. Reconnect the green ground wire.
4. Clean the print line on the printhead.
 - a. Use the swab from a Preventive Maintenance Kit (part number 47362) or a clean swab dipped in a solution of isopropyl alcohol (minimum 90%) and deionized water (maximum 10%).
 - b. On the underside of the printhead assembly, wipe along the brown strip from end to end.
 - c. Allow the solution to evaporate.
5. See [Figure 7](#). Align the snap tabs on the bottom of the media chute with the slots in the printer chassis.
6. Press the back edge of the printhead assembly into the slots and then press on the metal printhead lever plate to snap the printhead assembly into place.

Resume Operation

1. See [Figure 6](#). To close the upper cover, rock the front edge down, push the cover toward the back of the printer, and then push the cover down.
2. Turn on (I) the printer.
3. Insert the media cartridge into the printer.

61331M Platen Roller Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Platen Roller Replacement Kit in the HC100™. Read these instructions thoroughly before installing this kit.

Prepare for Installation

Parts List

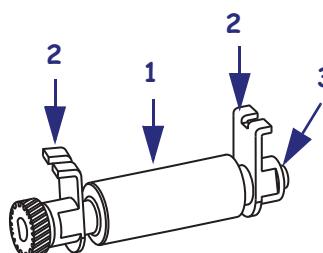
Before proceeding, verify that your kit contains the items for your printer listed below.

✓	Item	Qty	Part Number	Description
	Ref	1	61331M	Platen Roller Maintenance Kit
	1	1	<i>61241</i>	Platen Shaft
	2	2	<i>61232</i>	Locking Platen Bearing
	3	1	<i>02133</i>	External E-Ring 0.188 in.

Bold = Part available for purchase.

Italic = Part not available for purchase; listed and shown for reference only.

Figure 9 • Kit Contents



Tools Required



Tools • You need these tools to complete this procedure:

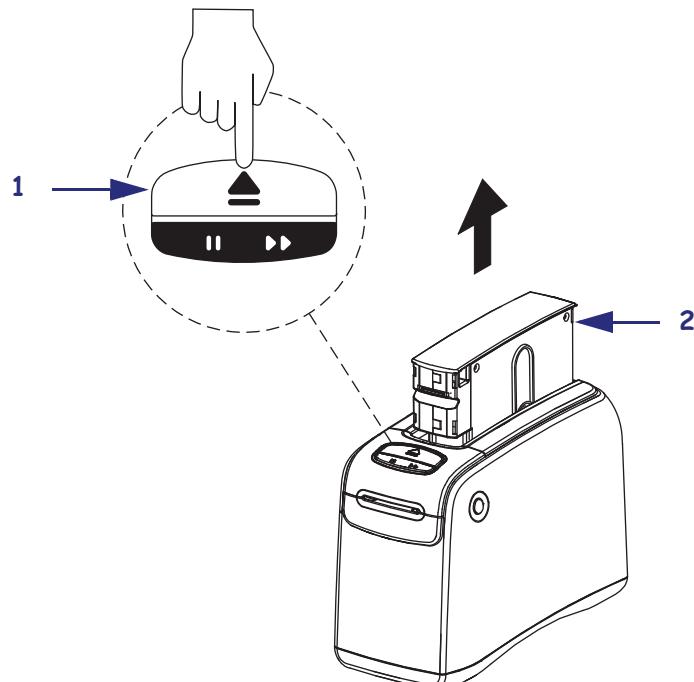
- Antistatic Wriststrap and Mat
- 47362* Zebra Preventive Maintenance Kit

* In place of the Preventive Maintenance Kit, you may use a clean swab dipped in a solution of isopropyl alcohol (minimum 90%) and deionized water (maximum 10%).

Remove the Media Cartridge

1. See [Figure 10](#). Press Eject and remove the media cartridge.

Figure 10 • Media Cartridge, Eject Button, and HC100



1	Eject button
2	Media cartridge

2. Did the cartridge eject?

If...	Then...
Yes	<ul style="list-style-type: none"> a. Remove the media cartridge and set aside. b. Go to Open the Printer.
No	<ul style="list-style-type: none"> a. Turn off (O) the power switch. b. Turn on (I) the power and wait for the printer to power up completely. c. Press Eject. d. Continue with step 3.

3. Did the cartridge eject this time?

If...	Then...
Yes	<ul style="list-style-type: none"> a. Remove the media cartridge and set aside. b. Go to Open the Printer.
No	<ul style="list-style-type: none"> a. Turn off (O) the power switch. b. Turn on (I) the power and wait for the printer to power up completely. c. Press and hold Eject for six seconds. d. Release Eject. e. If the cartridge ejected, go to Open the Printer. f. If the cartridge did not eject, continue with step 4.

4. Contact Technical Support. See [Contacts](#) on page 9.

Open the Printer



1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

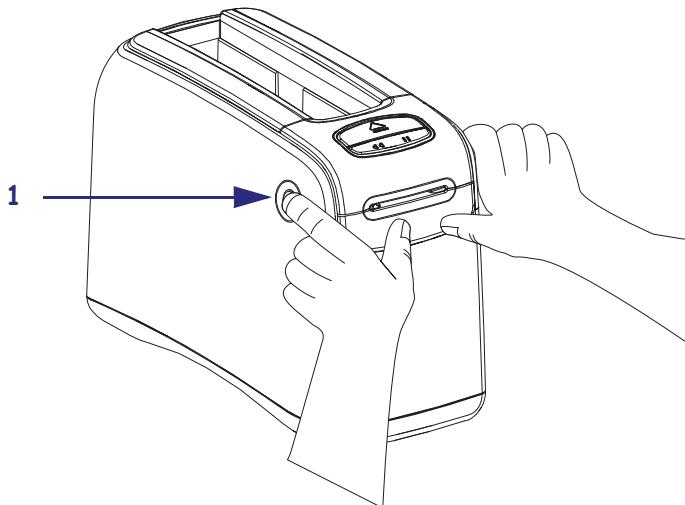


2. Place the printer on the antistatic mat.
3. **Caution** • Turn off (O) the printer before performing the following procedure.

Turn off (O) the printer.

4. See [Figure 11](#). Press the upper cover release buttons located on both sides of the printer.

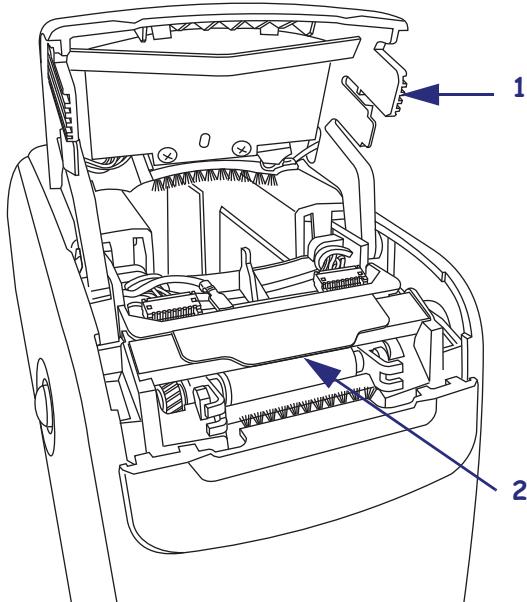
Figure 11 • Opening the HC100



1 | Upper cover release button (one on each side)

5. See [Figure 12](#). Raise the cover up and tilt it toward the back until it is almost resting on the top of the printer.

Figure 12 • HC100 with Cover Open



1	Upper cover
2	Metal printhead lever plate

Reposition the Printhead Assembly



Caution • Before touching the printhead assembly, discharge any built-up static electricity by touching the metal back plate on the printer near the On/Off switch or by using an antistatic wriststrap and mat.

Caution • Be careful not to touch the printhead with any tools. This could damage the printhead.



Caution • The printhead may be hot and could cause severe burns. Allow the printhead to cool.

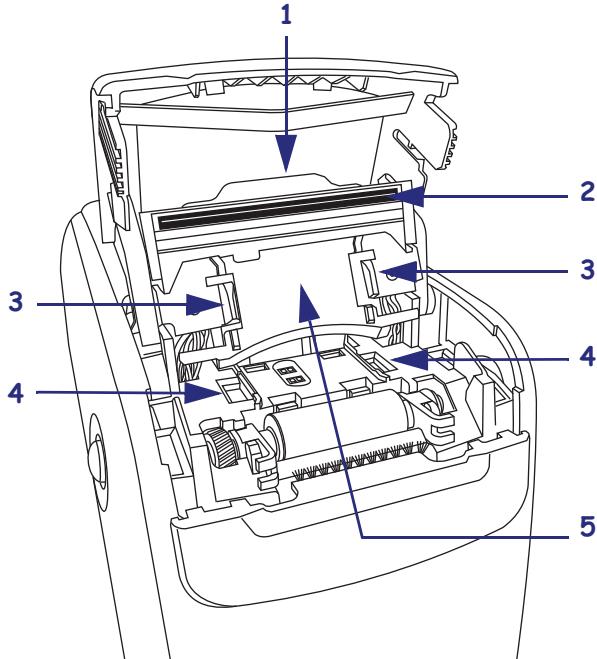
1.

Caution • While performing any tasks near an open printhead, remove all rings, watches, hanging necklaces, identification badges, or other metallic objects that could touch the printhead.

See [Figure 12](#). To release the printhead assembly, lift up on the metal printhead lever plate along the front edge of the printhead assembly.

2. See [Figure 13](#). Lift the printhead assembly up and pull it forward ensuring the snap tabs underneath the printhead assembly are disengaged from the printer.

Figure 13 • Closeup of Printhead Assembly Parts



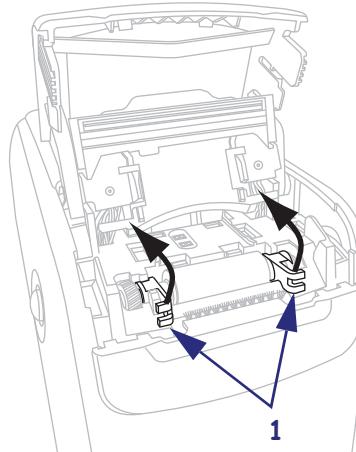
1	Metal printhead lever plate
2	Underside of printhead assembly
3	Snap tabs (2)
4	Chassis slots (2)
5	Media chute

3. Stand the printhead assembly up and back against the upper cover. It will stay in this position until moved.

Remove the Platen Roller

1. See [Figure 14](#). To unlock the platen roller, rotate the green platen release tabs until they are in a vertical position.

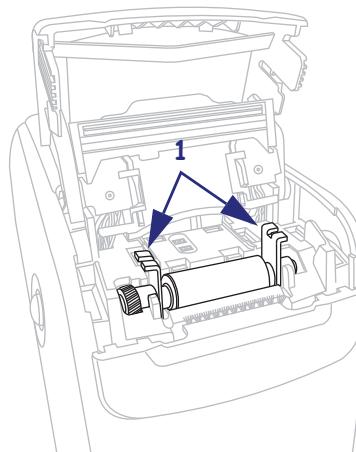
**Figure 14 • Platen Roller Locked in Place
(Release tabs shown in locked position)**



1 Platen release tabs (2)

2. See [Figure 15](#). Pull both of the platen release tabs straight up.

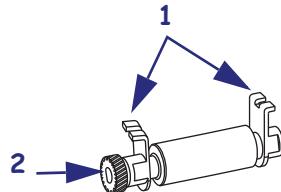
**Figure 15 • Platen Roller Unlocked
(Release tabs shown in unlocked position)**



1 Platen release tabs (2)

3. See [Figure 16](#). Remove the platen roller assembly and discard.

Figure 16 • Platen Roller Assembly



1	Platen release tabs (2)
2	Platen gear

Install the New Platen Roller

1. **Caution •** Remove all jewelry that could come into contact with the printhead or other printer parts.

See [Figure 16](#). Holding both release tabs in a vertical position with the platen gear on the left, drop the platen roller into place in the printer chassis.

2. To lock the platen roller, rotate the green platen release tabs down until they are pointed toward the front of the printer.
3. Clean the print line on the printhead.
 - a. Use the swab from a Preventive Maintenance Kit (part number 47362) or a clean swab dipped in a solution of isopropyl alcohol (minimum 90%) and deionized water (maximum 10%).
 - b. On the underside of the printhead assembly, wipe along the brown strip from end to end.
 - c. Allow the solution to evaporate.
4. See [Figure 13](#). To replace the printhead assembly, align the snap tabs on the bottom of the media chute with the slots in the printer chassis.
Be careful not to touch the print line.
5. Press the back edge of the printhead assembly into the slots and then press on the metal printhead lever plate to snap the printhead assembly into place.

Resume Operation

1. See [Figure 12](#). To close the upper cover, rock the front edge down, push the cover toward the back of the printer, and then push the cover down.
2. Turn on (I) the printer.
3. Insert the media cartridge into the printer.

61335M Main Logic Board Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the Main Logic Board (MLB) maintenance kit in the HC100 printer.

Read these instructions thoroughly before installing this kit.

Prepare for Installation

Parts List

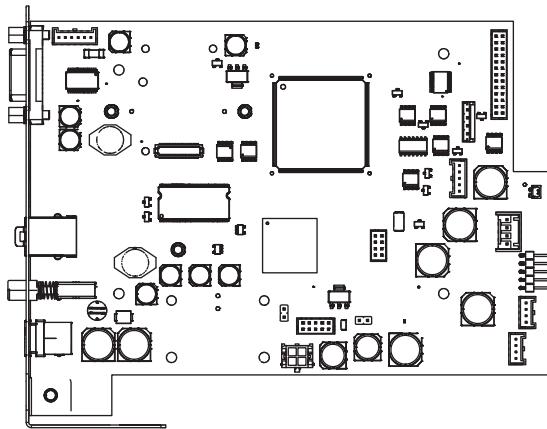
Before proceeding, verify that your kit contains the items for your printer listed below.

✓	Item	Qty	Part Number	Description
	Ref	1	61335M	HC100 Main Logic Board (MLB), 8MB Maintenance Kit
	Ref	1	61336M	HC100 Main Logic Board (MLB), 64MB Maintenance Kit

Bold = Part available for purchase.

Italic = Part not available for purchase; listed and shown for reference only.

Figure 17 • Kit Contents



Tools Required



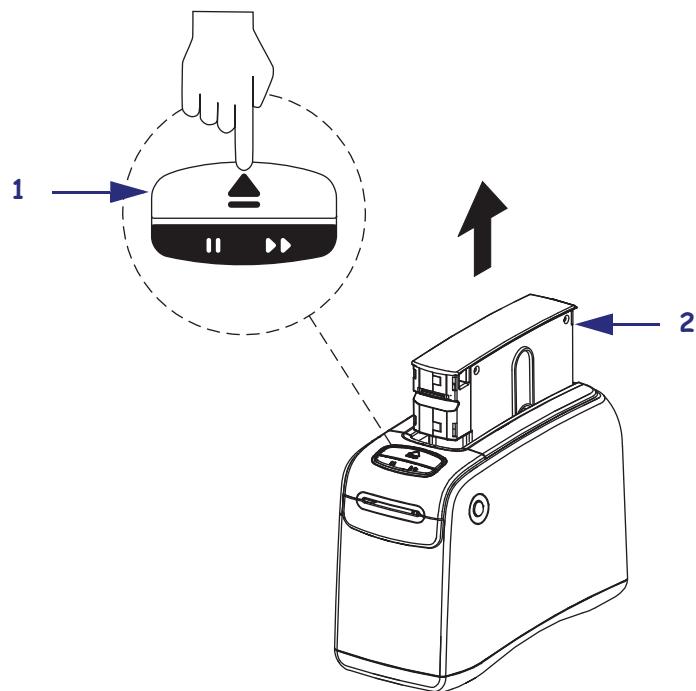
Tools • You need these tools to complete this procedure:

<input type="checkbox"/> Phillips Screwdriver Set	<input type="checkbox"/> Metric Open End Wrench Set
<input type="checkbox"/> Flat-blade Screwdriver Set	<input type="checkbox"/> Antistatic Wriststrap and Pad
<input type="checkbox"/> Metric Nutdriver Set	

Remove the Media Cartridge

1. See Figure 18. Press Eject.

Figure 18 • Media Cartridge, Eject Button, and HC100



1	Eject button
2	Media cartridge

2. Did the cartridge eject?

If...	Then...
Yes	<ul style="list-style-type: none">a. Remove the media cartridge and set aside.b. Go to Open the Printer on page 43.
No	<ul style="list-style-type: none">a. Turn off (O) the power switch.b. Turn on (I) the power and wait for the printer to power up completely.c. Press Eject.d. Continue with step 3.

3. Did the cartridge eject this time?

If...	Then...
Yes	<ul style="list-style-type: none">a. Remove the media cartridge and set aside.b. Go to Open the Printer on page 43.
No	<ul style="list-style-type: none">a. Turn off (O) the power switch.b. Turn on (I) the power and wait for the printer to power up completely.c. Press and hold Eject for six seconds.d. Release Eject.e. If the cartridge ejected, go to Open the Printer.f. If the cartridge did not eject, continue with step 4.

4. Contact Technical Support. See [Contacts](#) on page 9.

Open the Printer



Caution • A qualified service technician must perform this installation.



1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

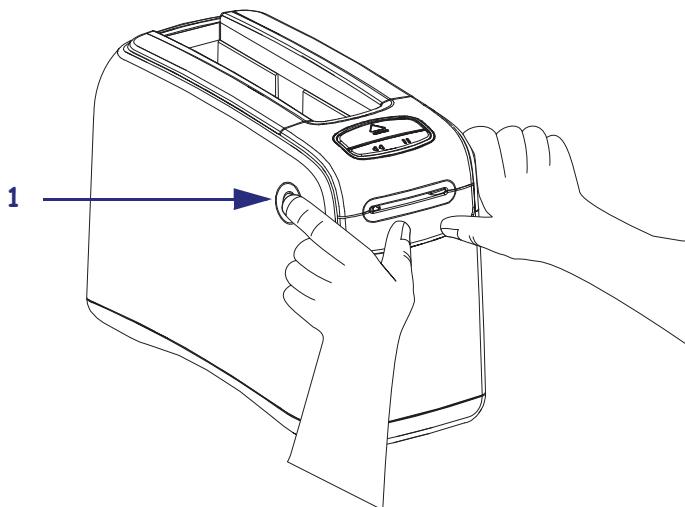


2. Place the printer on the antistatic mat.
3. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

Turn off (O) the printer and disconnect the DC power cord and all data cables.

4. See [Figure 19](#). Press the upper cover release buttons located on both sides of the printer.

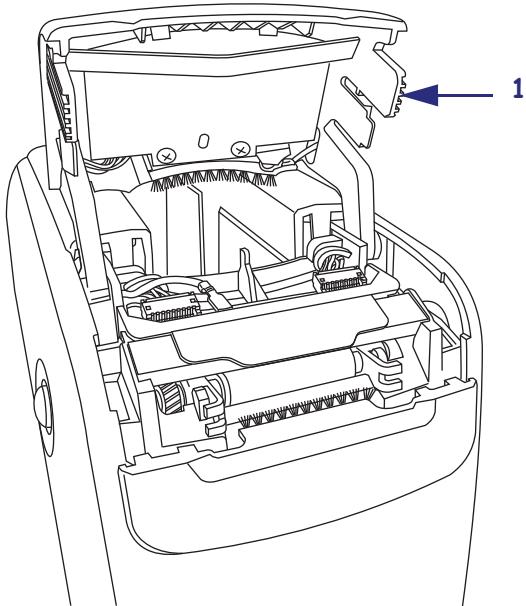
Figure 19 • Opening the HC100



1 Upper cover release button (one on each side)

5. See [Figure 20](#). Raise the cover up and tilt it toward the back.

Figure 20 • HC100 with Cover Open



1 | Upper cover

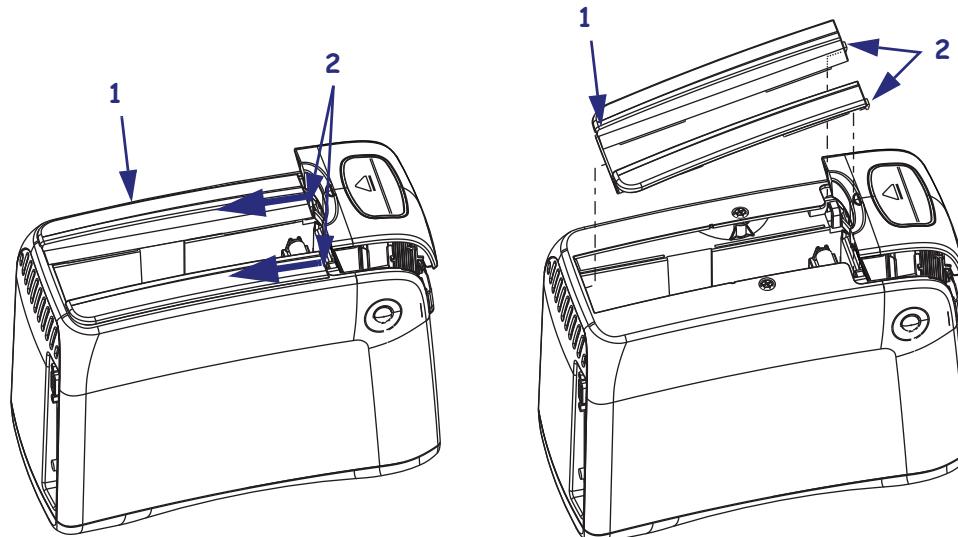
Remove the Outer Enclosure and Trim



Note • Retain all parts removed during disassembly, unless otherwise directed.

1. See [Figure 21](#). Remove the trim plate by pressing each tab toward the rear of the printer with your fingers and then lifting the trim plate off.

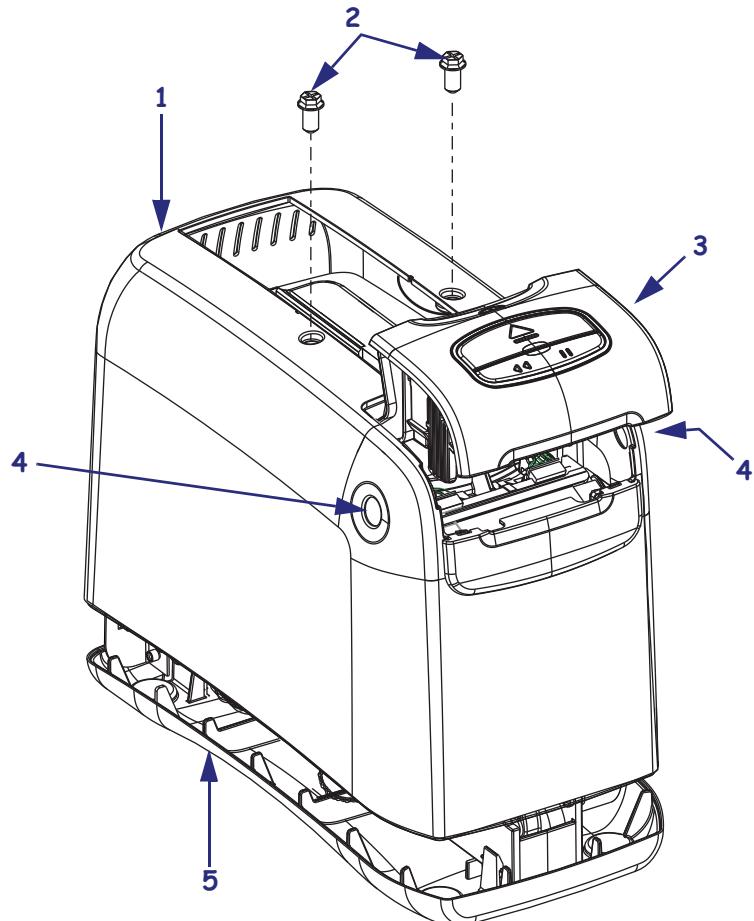
Figure 21 • Remove the Trim Plate



1	Trim plate
2	Tabs

2. Remove the two mounting screws.

Figure 22 • Remove the Mounting Screws

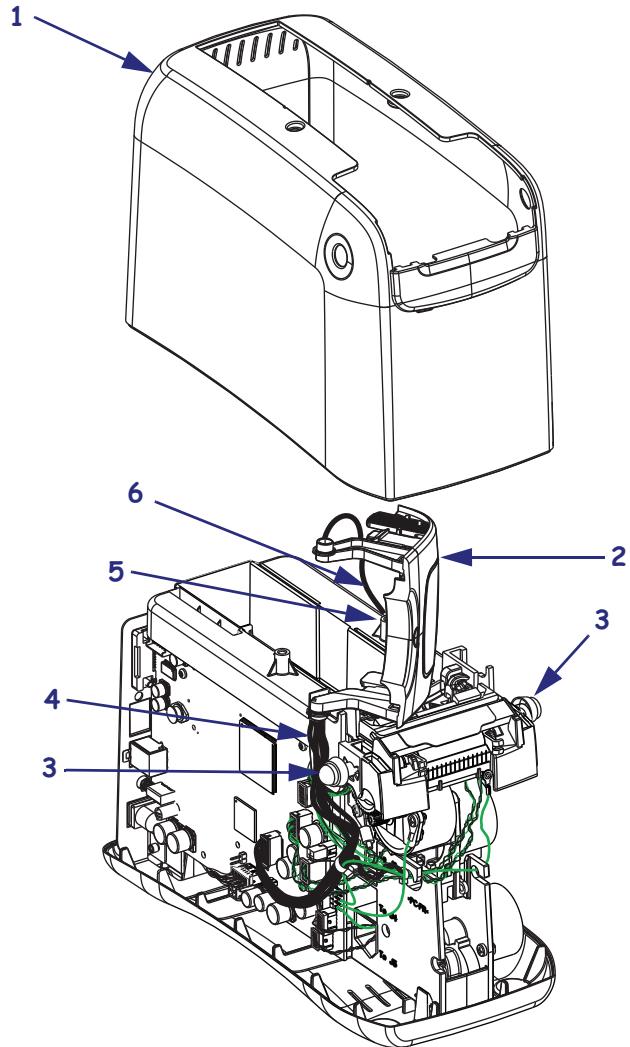


1	Outer enclosure
2	Outer enclosure mounting screws (2)
3	Upper print mechanism cover
4	Upper cover release buttons (2)
5	Base

3. Press the upper cover release buttons located on both sides of the printer and then lift the outer enclosure slightly off of the base.

4. See [Figure 23](#). Pull the upper cover out of the printer, turn it on its side, and then pull the outer enclosure off the printer.

Figure 23 • Remove the Outer Enclosure



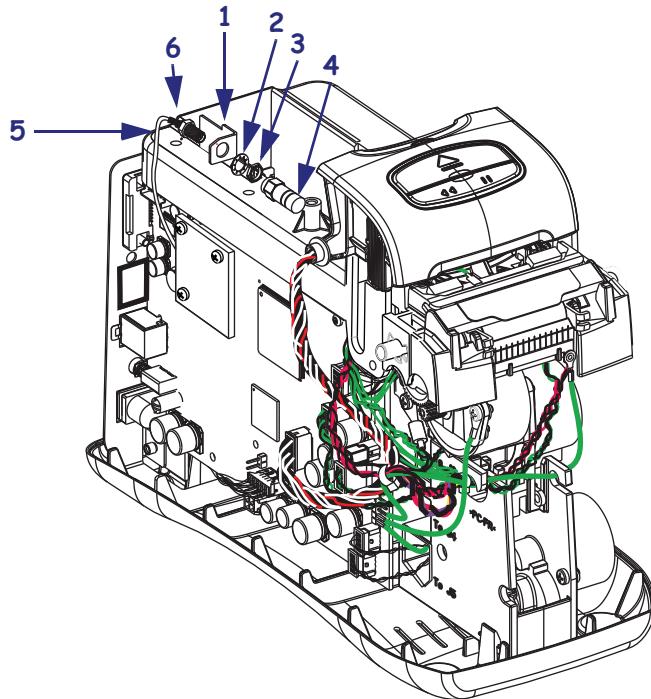
1	Outer enclosure
2	Upper print mechanism cover
3	Upper print mechanism release buttons (2)
4	User interface cable
5	Mounting post
6	Ground wire

Remove the Old Main Logic Board (MLB)

1. Do you have a wireless card installed?

If...	Then...
No	Continue with step 2 .
Yes	<ul style="list-style-type: none"> a. See Figure 24. Disconnect the antenna cable from the antenna by removing the antenna from the cable connector, and then removing the mounting nut and lock washer securing the cable to the antenna bracket. b. Remove the antenna cable from the antenna bracket. c. Continue with step 2.

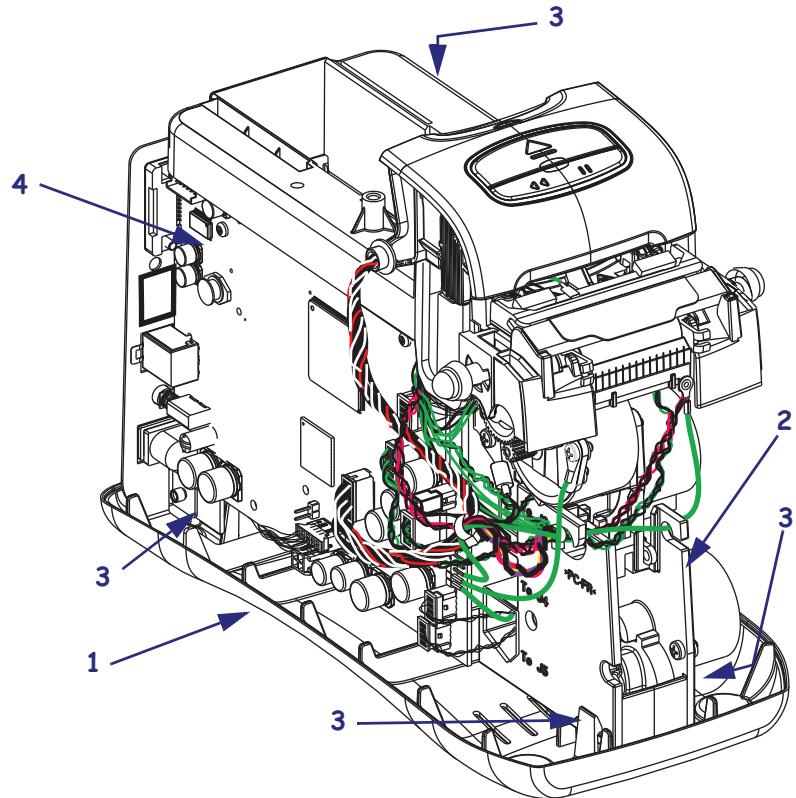
Figure 24 • Remove the Antenna Cable



1	Antenna mounting bracket
2	Lock washer
3	Mounting nut
4	Antenna
5	Antenna cable
6	Antenna cable connector

2. Remove the main frame assembly from the base by prying the four tabs away from the main frame and lifting it off of the base.

Figure 25 • Remove the Main Frame

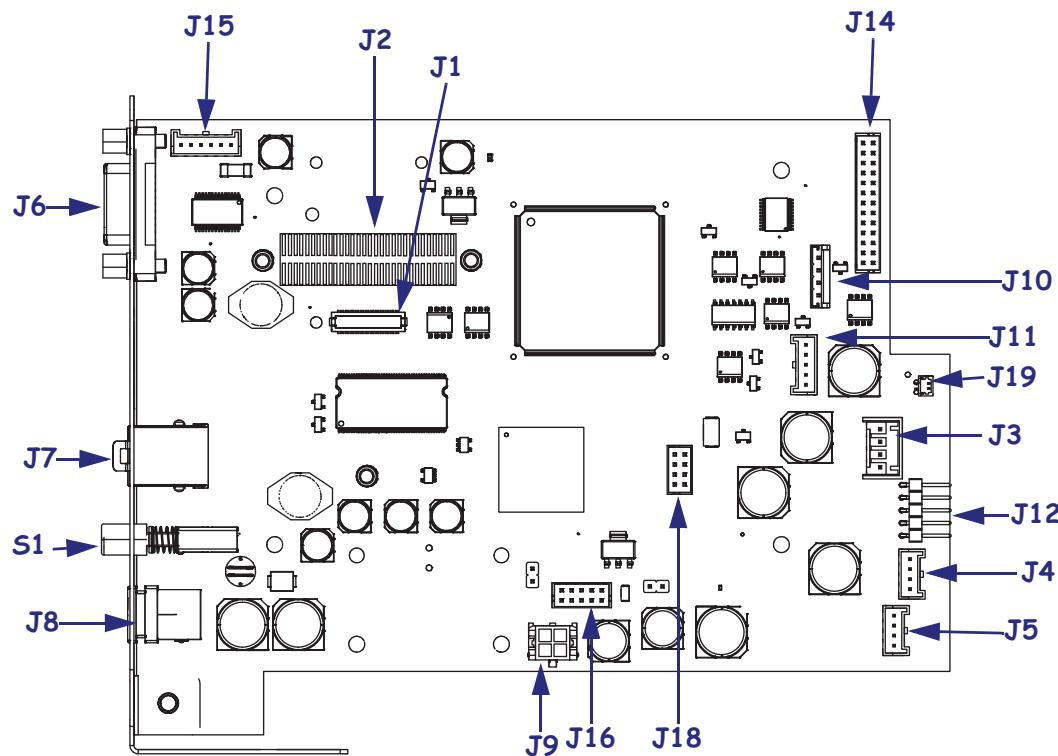


1	Base
2	Main frame assembly
3	Tabs (4)
4	Main logic board (MLB)

3. Lay the main frame assembly on its side on the antistatic mat with the MLB facing up.

4. See Figure 26. Disconnect all cables and ground wires from the MLB.

Figure 26 • Disconnect all Cables



J1	Wireless board
J2	Wired ethernet board
J3	Platen motor
J4	Transport motor
J5	Lock eject
J6	Serial port
J7	USB port
J8	Power input
J9	Open

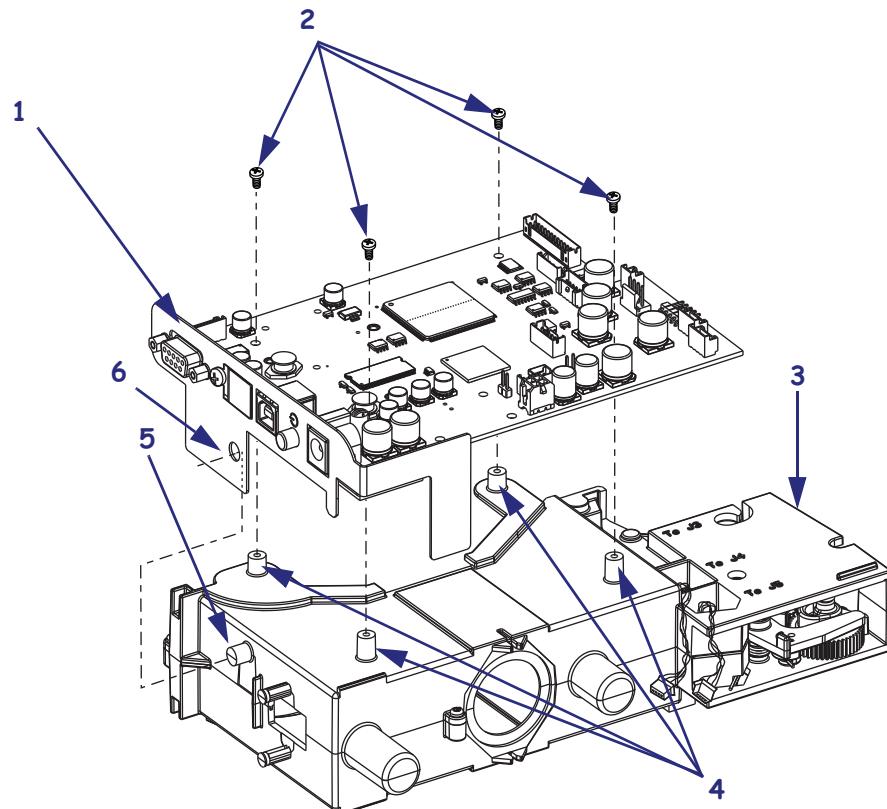
J10	Lock pin sensor
J11	Media sensor
J12	Ground pins
J14	Printhead
J16	Smartcard reader
J18	User interface
J19	Thermistor
S1	On/Off switch

5. See [Figure 27](#). Remove the MLB by removing the four screws securing it, sliding it to the rear off the guide post and then lifting it off.



Note • The print mechanism and upper cover have been removed for clarity. Your printer will still have these assemblies attached.

Figure 27 • Remove the MLB

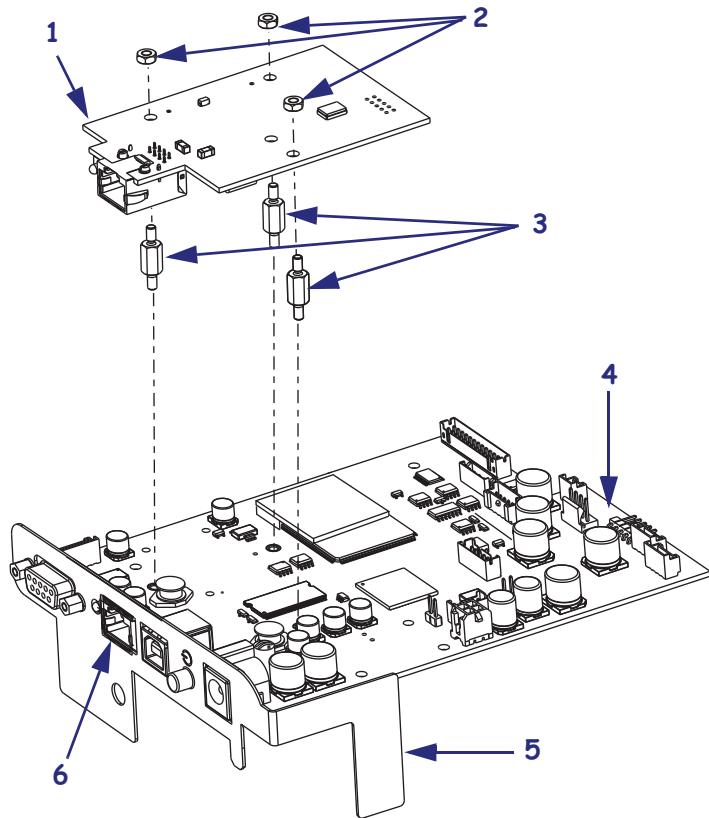


1	MLB
2	MLB mounting screws (4)
3	Main frame assembly
4	Mounting posts (4)
5	Guide post
6	Guide hole

6. Which communication option is being used?

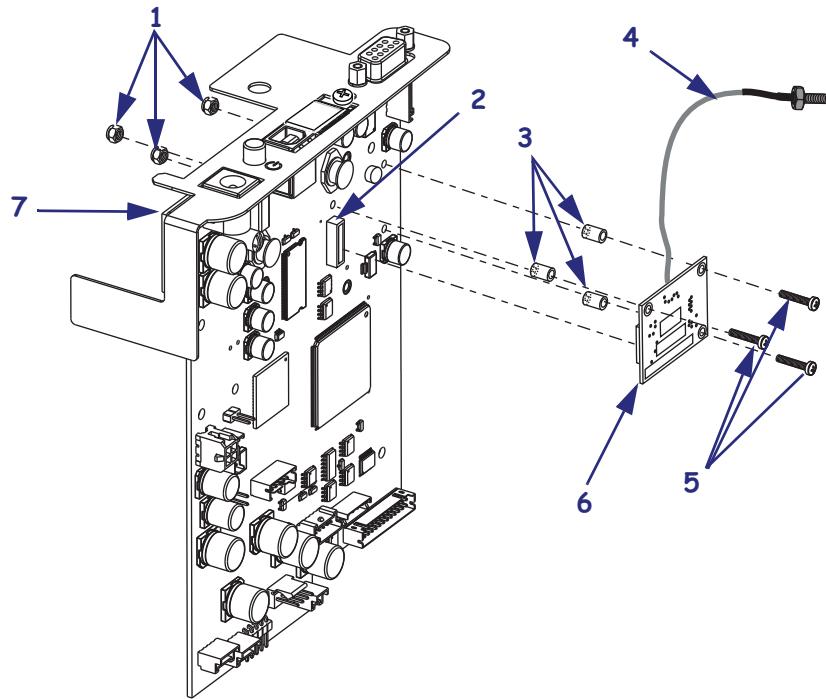
If you have a...	Then...
Wired Ethernet	<ol style="list-style-type: none">a. See Figure 28. Remove the wired ethernet board by removing the three mounting nuts.b. Slide the wired ethernet board off of the standoffs.c. Remove the three standoffs from the old MLB.d. Go to Install the New MLB on page 55.
Wireless Ethernet	<ol style="list-style-type: none">a. See Figure 29. Remove the three mounting screws, spacers, and nuts.b. Remove the wireless ethernet board by pulling it out of connector J1 on the MLB. <p>Note • Leave the antenna cable connected to the wireless ethernet board.</p> <ol style="list-style-type: none">c. Go to Install the New MLB on page 55.
Serial or USB port	Go to Install the New MLB on page 55 .

Figure 28 • Remove the Wired Ethernet Board



1	Wired Ethernet board
2	Mounting nuts (3)
3	Standoffs (3)
4	MLB
5	MLB bracket
6	Ethernet access hole

Figure 29 • Remove the Wireless Ethernet Board



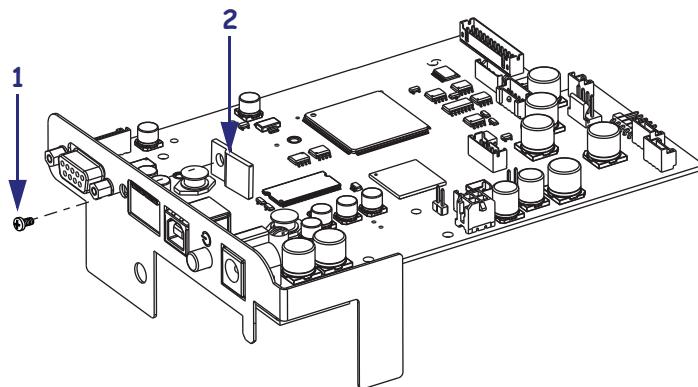
1	Mounting nuts (3)
2	J1
3	Spacers (3)
4	Antenna cable
5	Mounting screws (3)
6	Wireless board
7	MLB

Install the New MLB

1. Which communication option is being used?

If you have a...	Then...
Wired Ethernet	<ul style="list-style-type: none"> a. See Figure 28 on page 53. Install the three standoffs on the new MLB. b. See Figure 30. Remove the Ethernet cover plate from the MLB bracket by removing the screw securing it. c. Slide the wired ethernet board into the hole in the MLB bracket and then onto the three standoffs. d. Install the three mounting nuts. e. Continue to step 2.
Wireless Ethernet	<ul style="list-style-type: none"> a. See Figure 29. Install the wireless board connector into J1 on the MLB. b. Slide a spacer under the wireless board as aligning it with a mounting holes in the wireless board. c. Insert one of the mounting screws through the mounting hole in the wireless board and then through the spacer and the MLB. d. Install one of the mounting nuts, but do not tighten at this time. e. Repeat this procedure for the other two mounting screws and then tighten the three mounting nuts. f. Continue to step 2.
Serial or USB port	Continue to step 2 .

Figure 30 • Remove the Ethernet Cover



1	Mounting screw
2	Ethernet cover plate

2. See [Figure 27 on page 51](#). Slide the new MLB under all the cable connectors previously removed, while aligning the guide post on the rear of the main frame with the guide hole in the MLB bracket.
3. Align the mounting holes of the MLB with the mounting posts on the main frame assembly.

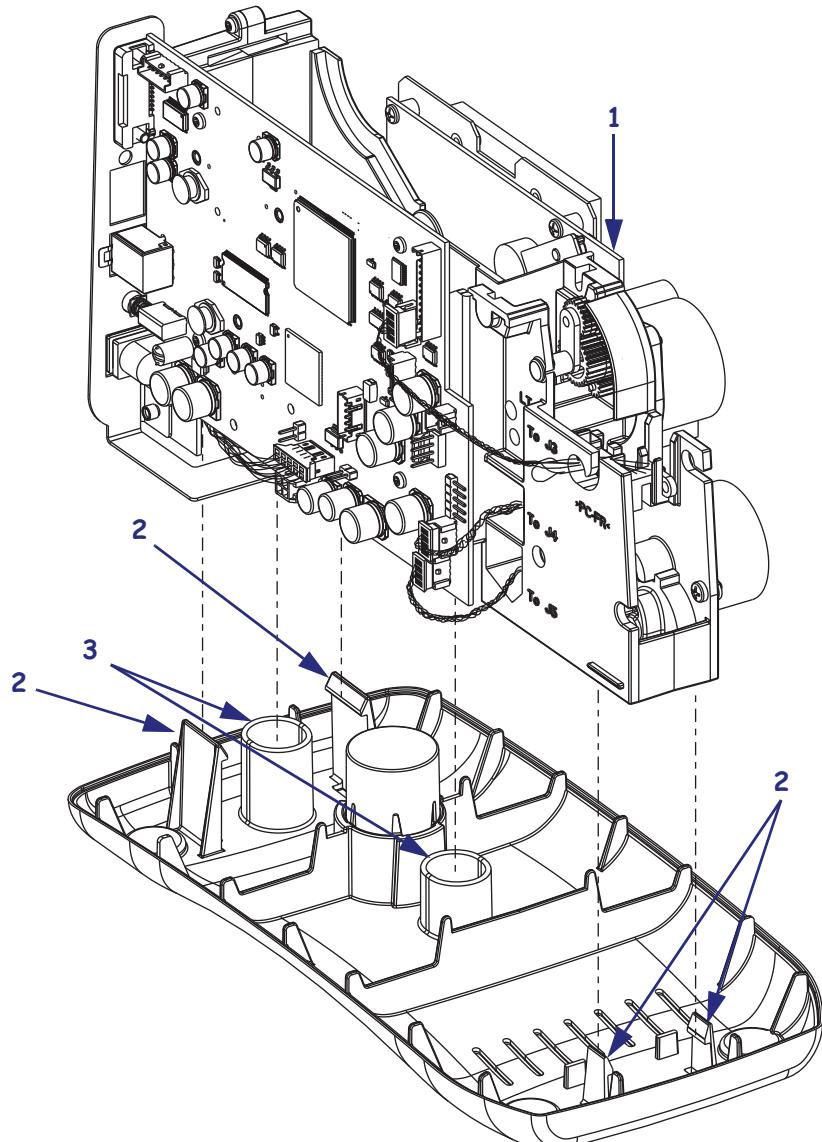
4. Install the four mounting screws from the maintenance kit.

5. **Important** • Ensure all cable connectors are fully seated and all connector housings are flush against the main logic board.

See [Figure 26 on page 50](#). Reconnect all cable connectors.

6. See [Figure 31](#). Reinstall the main frame assembly onto the base by aligning the two positioning posts with the positioning holes in the base.

Figure 31 • Reinstall the Main Frame Assembly



1	Main frame assembly
2	Tabs
3	Positioning holes (2)

7. Ensure that all wires are clear of all tabs and then press down until all tabs are engaged.

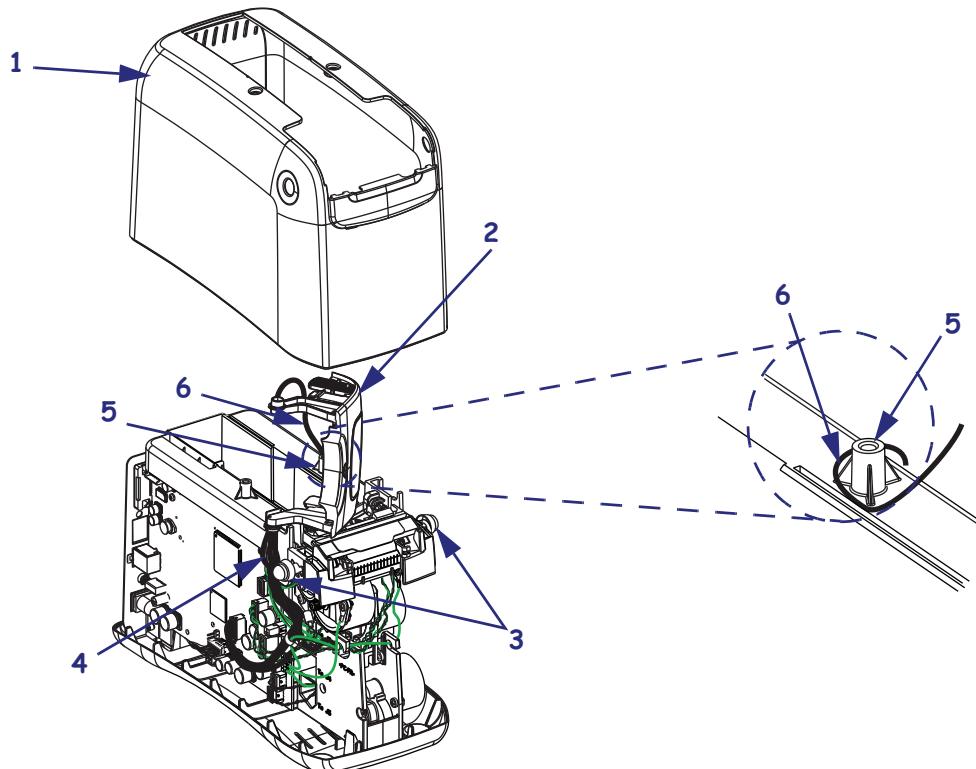
Reinstall the Outer Enclosure and Trim

1. Is there a wireless board installed?

If...	Then...
No	Continue with step 2 .
Yes	<ul style="list-style-type: none"> a. See Figure 24 on page 48. Reinstall the antenna cable into the antenna mounting bracket. b. Reinstall the antenna. c. Continue with step 2.

2. See [Figure 32](#). Turn the upper print mechanism cover on its side as shown with the ground wire to the rear of the mounting post and the user interface cable to the rear of the upper print mechanism release button.

Figure 32 • Reinstall the Outer Enclosure and Trim



1	Outer enclosure	4	User interface cable
2	Upper print mechanism cover	5	Mounting post
3	Upper print mechanism release buttons (2)	6	Ground wire

3. Slide the outer enclosure over the print mechanism assembly while pressing the upper print mechanism release buttons until they are inside the outer enclosure.
4. Slip the left and right upper print mechanism legs inside the edges of the outer enclosure and ensure that the ground wire is still routed to the rear of the mounting post before it is seated on the base.
5. Slide the cover down until aligned and seated into the base.



6. **Caution** • When inserting self-threading screws, be careful to avoid cross-threading or stripping the plastic holes.

Reinstall the two mounting screws.

7. See [Figure 21 on page 45](#). Reinstall the outer trim plate by sliding the back edge in first and then lowering the front edges until they snap in place.

Resume Printer Operation

1. See [Figure 2 on page 2](#). To close the upper cover, rock the front edge down, push the cover toward the back of the printer, and then push the cover down.
2. Reinstall the data cables and DC power cord.
3. Turn on (I) the printer.
4. Insert the media cartridge into the printer.

61337M ZebraNet™ Internal Wireless Plus Print Server Assembly Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the ZebraNet™ Internal Wireless Plus Print Server in the HC100™. Read these instructions thoroughly before installing this kit.

Prepare for Installation

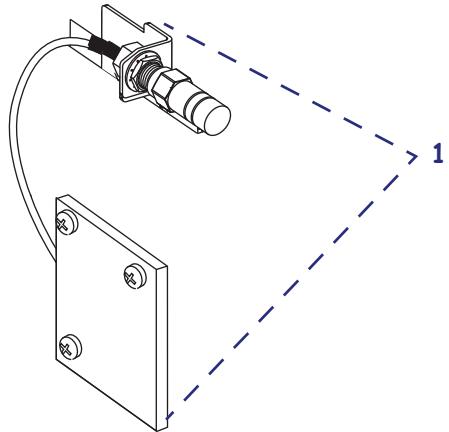
Parts List

Before proceeding, verify that your kit contains the items for your printer listed below.

✓	Item	Qty	Part Number	Description
	Ref	1	61337M	ZebraNet Internal Wireless Plus Print Server Assembly Maintenance Kit (Shown as a sub-assembly)
		1	<i>39516</i>	Spacer
		1	<i>CQ17544-G1</i>	PCBA Circuit Board, Radio 802.11G
		3	<i>BA17963-1</i>	Spacer, Radio Module
		3	<i>TH-SJ0306</i>	Screw, 2-56 x 7/16 Pan Head Phillips
		3	<i>TH-ZA0300</i>	Nut, Esna 2-56 SS NY-Lock Re OD
		1	<i>61305</i>	Bracket, Antenna Mounting
		1	<i>39538</i>	Antenna, 1 in. Stub 802.11G
		1	<i>39519</i>	PA Cable, Wireless Antenna
		1	<i>39526</i>	Washer, 1/4 Internal Lock
		1	<i>39527</i>	Nut, 1/4 36 Uns 2B Hex

Bold = Part available for purchase.
Italic = Part not available for purchase; listed and shown for reference only.

Figure 33 • Kit Contents



Tools Required



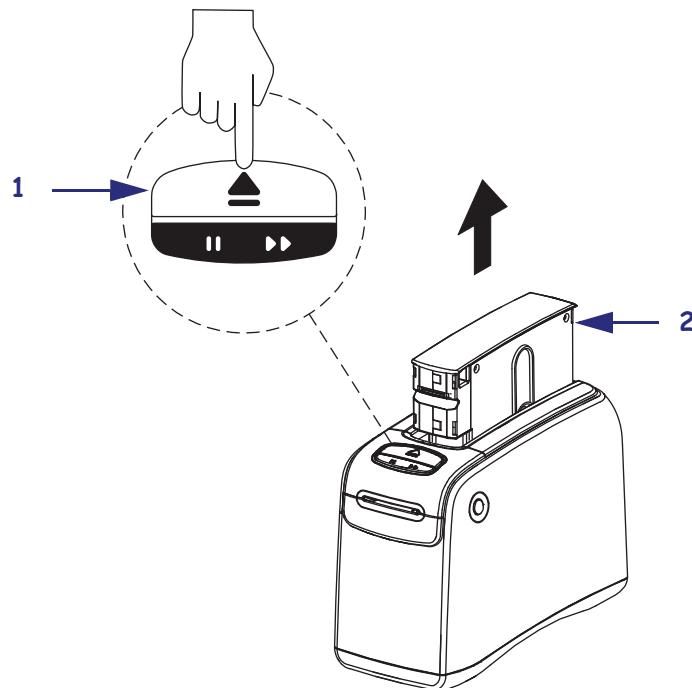
Tools • You need these tools to complete this procedure:

<input type="checkbox"/> Phillips Screwdriver Set	<input type="checkbox"/> Flat-blade Screwdriver Set
<input type="checkbox"/> Adjustable Crescent Wrench (8 mm)	<input type="checkbox"/> Metric Nutdriver Set
<input type="checkbox"/> Antistatic Wriststrap and Mat	

Remove the Media Cartridge

1. See [Figure 34](#). Press Eject and remove the media cartridge.

Figure 34 • Media Cartridge, Eject Button, and HC100



1	Eject button
2	Media cartridge

2. Did the cartridge eject?

If...	Then...
Yes	<ol style="list-style-type: none">Remove the media cartridge and set aside.Go to Open the Printer on page 63.
No	<ol style="list-style-type: none">Turn off (O) the power switch.Turn on (I) the power and wait for the printer to power up completely.Press Eject.Continue with step 3.

3. Did the cartridge eject this time?

If...	Then...
Yes	<ul style="list-style-type: none">a. Remove the media cartridge and set aside.b. Go to Open the Printer on page 63.
No	<ul style="list-style-type: none">a. Turn off (O) the power switch.b. Turn on (I) the power and wait for the printer to power up completely.c. Press and hold Eject for six seconds.d. Release Eject.e. If the cartridge ejected, go to Open the Printer on page 63.f. If the cartridge did not eject, continue with step 4.

4. Contact Technical Support. See [Contacts on page 9](#).

Open the Printer



Caution • A qualified service technician must perform this installation.



1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

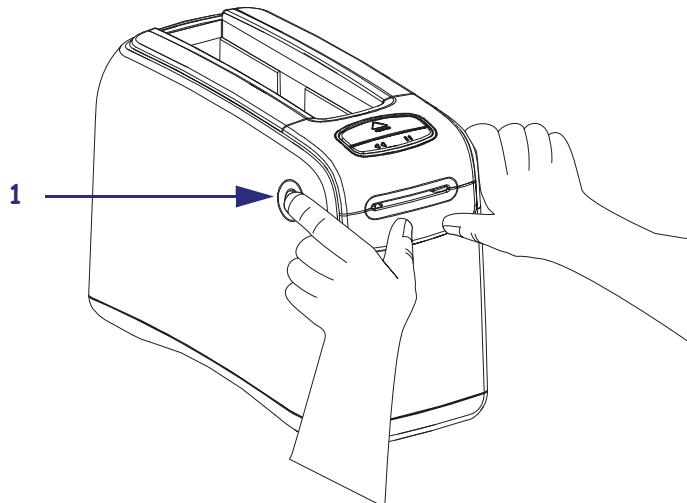


2. Place the printer on the antistatic mat.
3. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

Turn off (O) the printer and disconnect the DC power cord and all data cables.

4. See [Figure 35](#). Press the upper cover release buttons located on both sides of the printer.

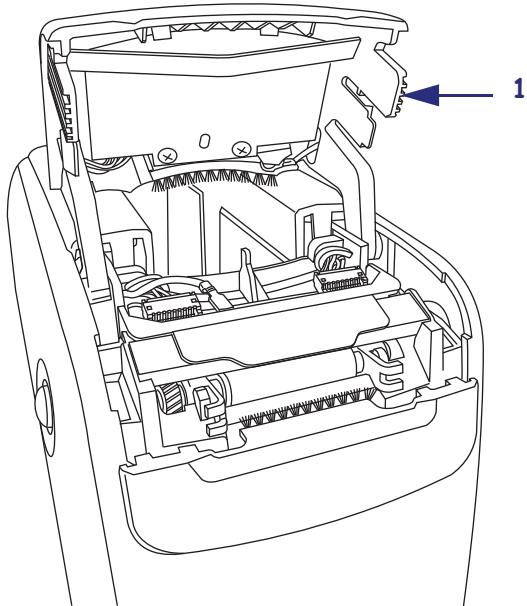
Figure 35 • Opening the HC100



1 Upper cover release button (one on each side)

5. See [Figure 36](#). Raise the cover up and tilt it toward the back.

Figure 36 • HC100 with Cover Open



1 | Upper cover

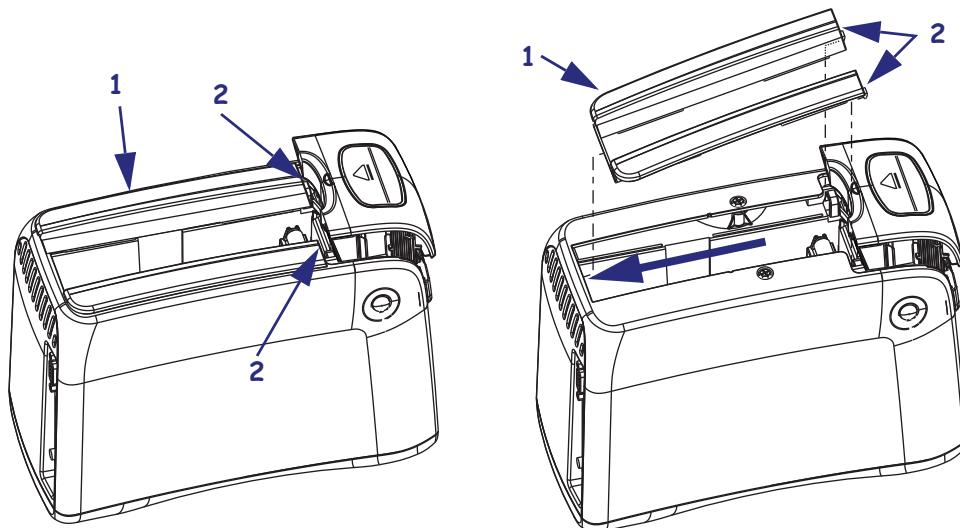
Remove the Outer Enclosure and Trim



Note • Retain all parts removed during disassembly, unless otherwise directed.

1. See [Figure 37](#). Press each tab toward the rear to release.
2. To remove the trim plate, slide the entire trim plate assembly back slightly and lift off.

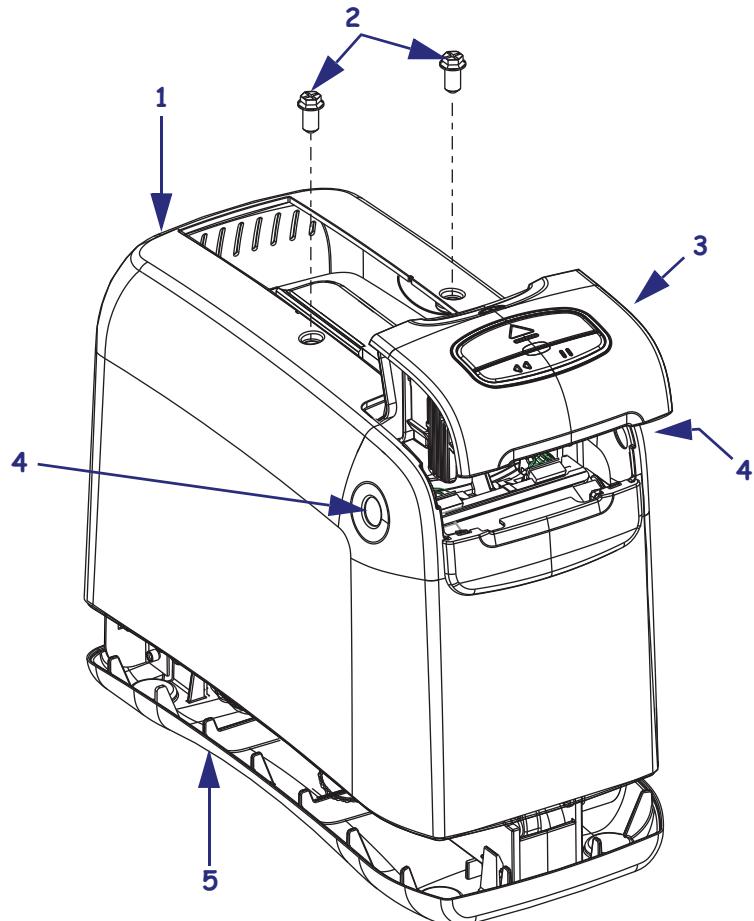
Figure 37 • Remove the Trim Plate



1	Trim plate
2	Tabs

3. See [Figure 38](#). Using a Phillips screwdriver, remove the two mounting screws.

Figure 38 • Remove the Mounting Screws

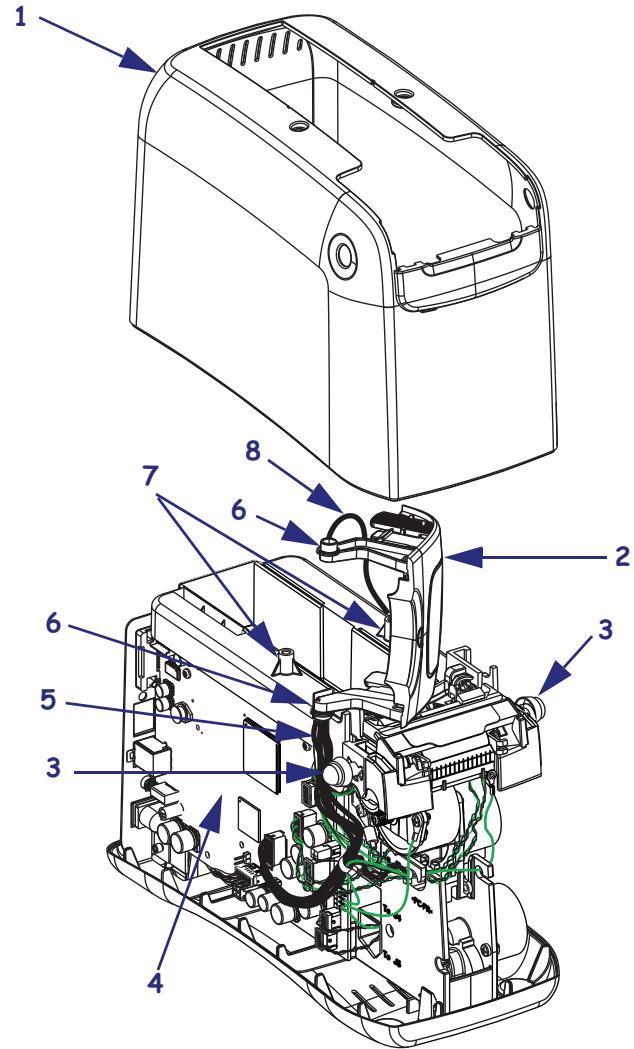


1	Outer enclosure
2	Enclosure mounting screws (2)
3	Upper print mechanism cover
4	Upper cover release buttons (2)
5	Base

4. Press the upper cover release buttons located on both sides of the printer and then lift the outer enclosure slightly off of the base.

5. See [Figure 39](#). Pull the upper cover out of the printer, turn it on its side, and then pull the outer enclosure off the printer.

Figure 39 • Remove the Outer Enclosure



1	Outer enclosure
2	Upper print mechanism cover
3	Upper print mechanism release buttons (2)
4	Main logic board (MLB)
5	User interface cable
6	Upper print mechanism arms (2)
7	Mounting post (2)
8	Ground wire

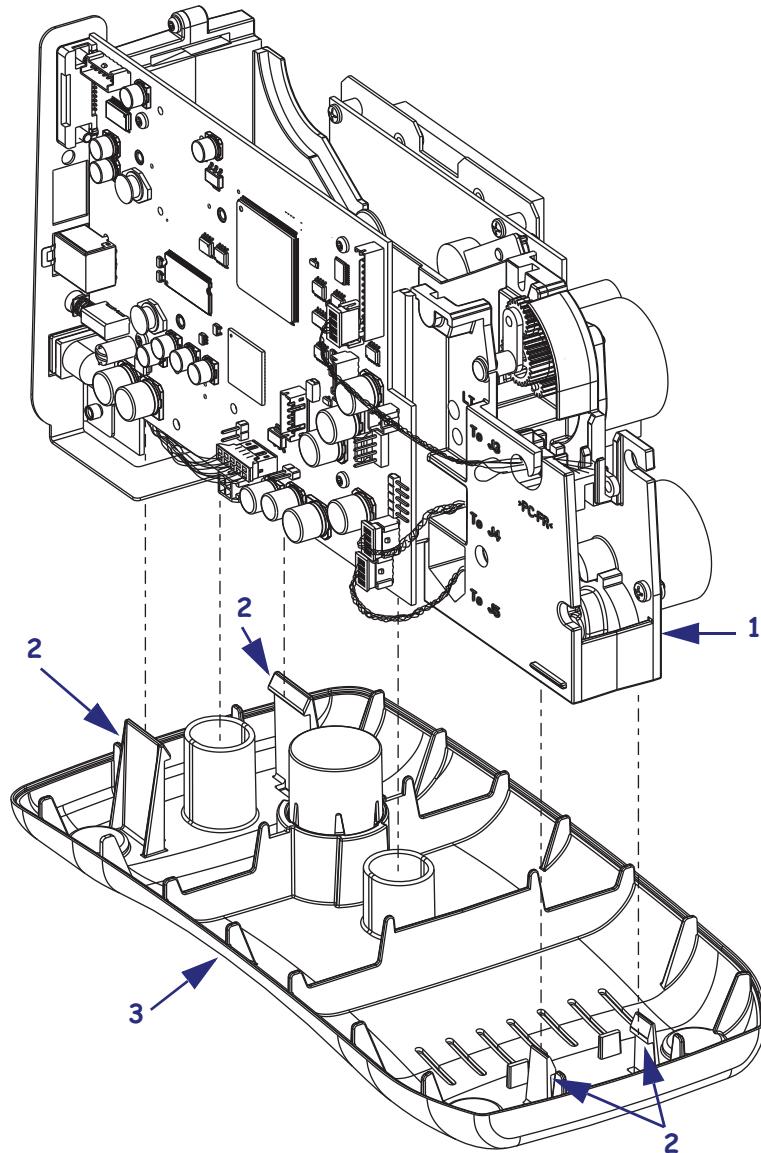
Remove the Main Frame and the Main Logic Board (MLB)

1. See [Figure 40](#). To remove the main frame assembly, pry all four of the white snap tabs away from the main frame and lift it up and out of the base.



Note • In [Figure 40](#), the print mechanism chassis and upper print mechanism cover have been removed to improve the clarity of this figure. Your printer will still have these assemblies attached.

Figure 40 • Remove the Main Frame



1	Main frame assembly
2	Tabs (4)
3	Base

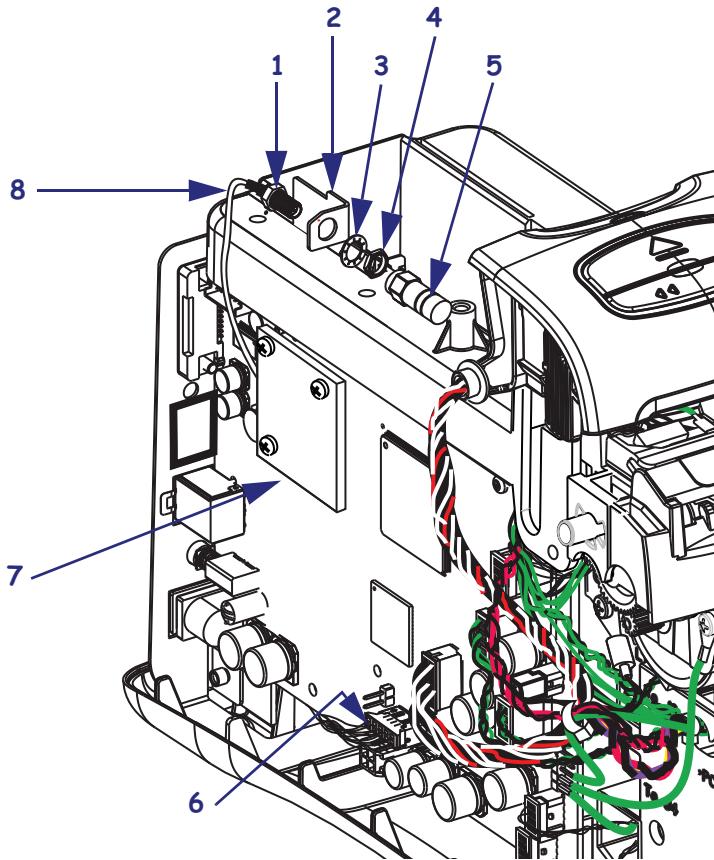
2. Lay the main frame assembly on its side on the antistatic mat with the MLB facing up.
3. Disconnect the smart card reader cable from J16 on the MLB.



Note • Do not disconnect the remaining cables and ground wires from the MLB. The rest of this procedure can be performed without removing the wires.

4. See [Figure 41](#). Disconnect the wireless antenna.
 - a. Unscrew the antenna from the end of the antenna cable connector.
 - b. Using an adjustable crescent wrench, remove the nut and lock washer from the end of the antenna cable connector.
 - c. Remove the antenna cable from the antenna bracket.
 - d. Remove the antenna bracket from the slot on the left side of the print mechanism chassis.
 - e. Discard all hardware and the antenna cable.

Figure 41 • Remove the Wireless Antenna



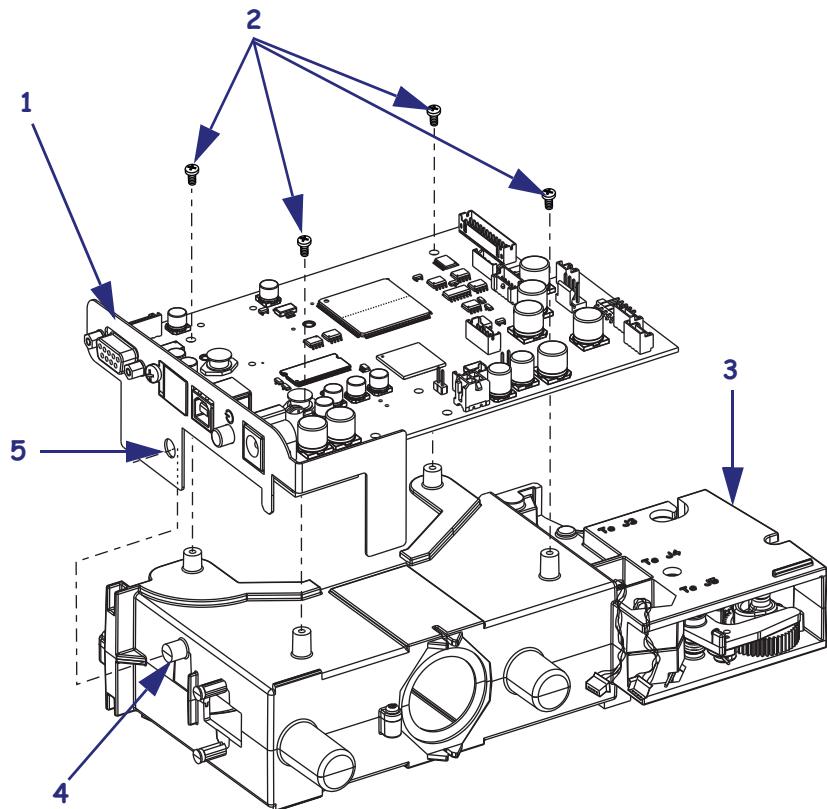
1	Antenna cable connector
2	Antenna bracket
3	Lock washer
4	Nut
5	Antenna
6	J16 connector
7	Wireless Plus Print Server board
8	Wireless cable

5. See [Figure 42](#). Using a Phillips screwdriver, remove the MLB by removing the four screws securing it.
6. Slide it to the rear and off of the guide post.



Note • In [Figure 42](#), the print mechanism chassis and upper print mechanism cover have been removed to improve the clarity of this figure. Your printer will still have these assemblies attached.

Figure 42 • Remove the MLB

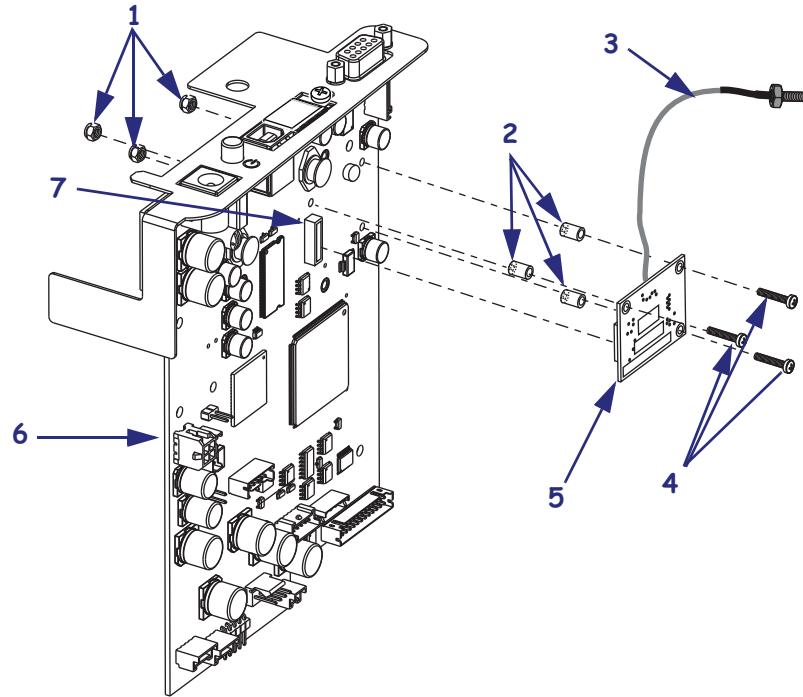


1	MLB
2	MLB mounting screws (4)
3	Main frame assembly
4	Guide post
5	Guide hole

Remove the Wireless Radio Board

1. See [Figure 43](#). Remove and discard the three Phillips mounting screws, standoffs, and nuts.

Figure 43 • Remove the Wireless Board



1	Mounting nuts (3)
2	Spacers (3)
3	Antenna cable
4	Mounting screws (3)
5	Wireless board
6	MLB
7	J1 connector

2. Remove and discard the wireless radio board by pulling it out of the J1 connector on the MLB.

Install the New Wireless Board

1. See [Figure 43 on page 72](#). Install the wireless radio board connector into J1 on the MLB.
2. See [Figure 42 on page 71](#). Slide a spacer under the wireless board aligning it with a mounting hole in the wireless board.
 - a. Insert one of the mounting screws through the mounting hole in the wireless board and then through the spacer and the MLB.
 - b. Install one of the mounting nuts on the back of the MLB, but do not tighten at this time.
 - c. Repeat [step 2](#) for the other two mounting screws, spacers, and nuts.
 - d. Tighten the three mounting nuts.

Reinstall the MLB

1. See [Figure 42 on page 71](#). Slide the MLB onto the rear guide post of the new main frame assembly.
2. Align the mounting holes of the MLB with the mounting posts on the main frame assembly.
3.

Caution • When inserting self-threading screws, be careful to avoid cross-threading or stripping the plastic holes.
Caution •

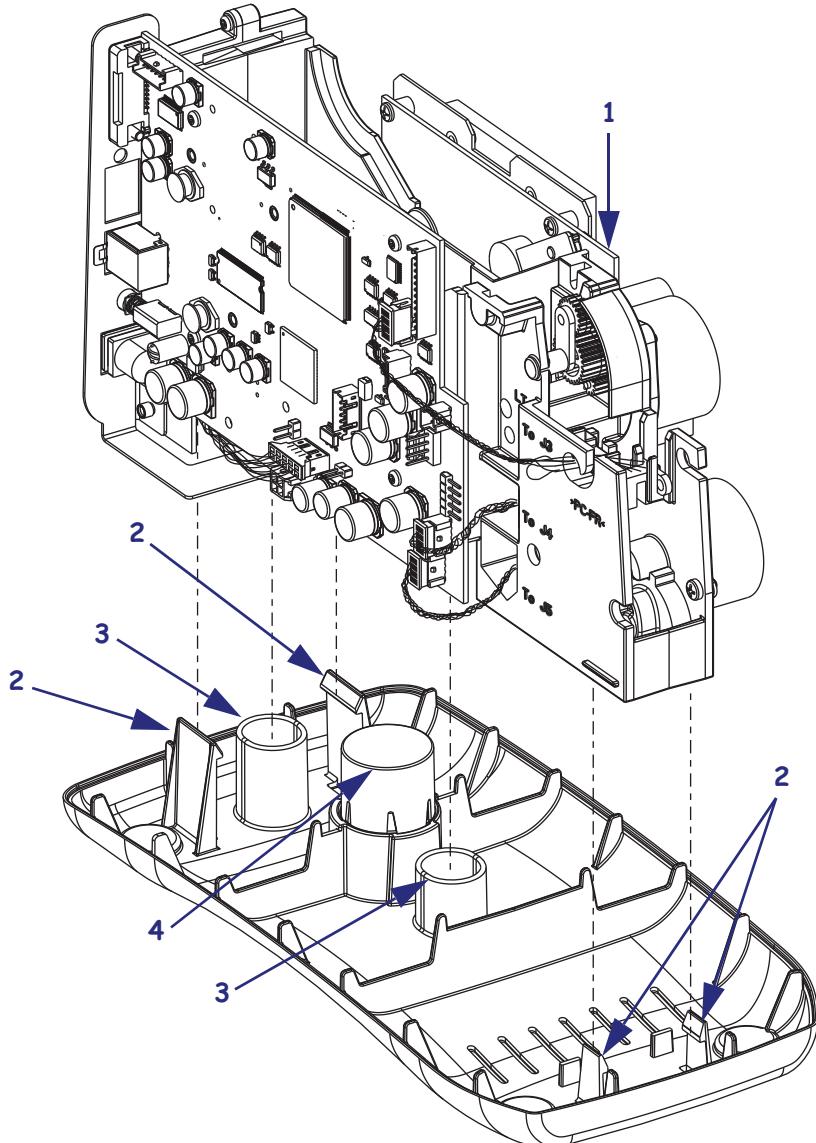
Reinstall the MLB on the main frame assembly using the four Phillips mounting screws previously removed.

4. Reconnect the smart card reader cable to J16 on the MLB.
5. See [Figure 41 on page 70](#). Reconnect the wireless antenna.
 - a. Insert the antenna bracket into the slot on the left side of the print mechanism chassis.
 - b. Insert the antenna cable into the antenna bracket.
 - c. Replace the lock washer and nut on the end of the antenna cable and tighten the nut using an adjustable crescent wrench.
 - d. Screw the antenna into the end of the antenna cable connector.

Reinstall the Main Frame Assembly

1. See [Figure 44](#). Reinstall the main frame assembly onto the base by aligning the two positioning posts with the positioning holes in the base.

Figure 44 • Reinstall the Main Frame Assembly



1	Main frame assembly
2	Tabs (4)
3	Positioning holes (2)
4	Eject spring

2. Ensure that all wires are clear of all tabs and then press down until all tabs are engaged.

Reinstall the Outer Enclosure and Trim



Important • Ensure all cable connectors are fully seated and all connector housings are flush against the main logic board.

1. See [Figure 39 on page 67](#). Turn the upper print mechanism cover on its side as shown with the ground wire to the rear of the mounting post and the user interface cable to the rear of the upper print mechanism release button.
2. Slide the outer enclosure over the print mechanism assembly while pressing the upper print mechanism release buttons until they are inside the outer enclosure.
3. Slip the left and right upper print mechanism arms inside the edges of the outer enclosure. Ensure that the ground wire is still routed to the rear of the mounting post before it is seated on the base.
4. Slide the enclosure down until aligned and seated into the base.

5. **Caution** • When inserting self-threading screws, be careful to avoid cross-threading or stripping the plastic holes.
Caution •

See [Figure 38 on page 66](#). Reinstall the two Phillips mounting screws.

6. See [Figure 37 on page 65](#). To reinstall the trim plate, slide the back edge in first, lower the front edges, and snap in place.

Resume Printer Operation

1. See [Figure 36 on page 64](#). To close the upper cover, rock the front edge down, push the cover toward the back of the printer, and then push the cover down.
2. Reinstall the data cables and DC power cord.
3. Turn on (I) the printer.
4. Insert the media cartridge into the printer.

61338M ZebraNet™ 10/100 Print Server Assembly Maintenance Kit

Installation Instructions

This kit includes the parts and documentation necessary to install the ZebraNet™ 10/100 Print Server in the HC100™. Read these instructions thoroughly before installing this kit.

Prepare for Installation

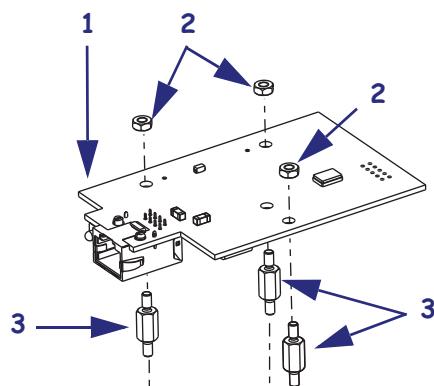
Parts List

Before proceeding, verify that your kit contains the items for your printer listed below.

✓	Item	Qty	Part Number	Description
	Ref	1	61338M	HC100 10/100 Ethernet Maintenance Kit,
	1	1	79501-013	HC100 Ethernet Option Printed Circuit Board Assembly
	2	3	HW10460	Hex Nut, M3 x 2.4 x 5.5 mm (Qty. of 25)
	3	3	HW79656	Standoff, M3 x 0.5 x 10 mm (Qty. of 12)
		1	79671	Cover, RJ45 (Not shown)

N/A = Not available as a separate part (listed for identification purposes only).
Bold = Part available for purchase.
Italic = Part not available for purchase; listed and shown for reference only.

Figure 45 • Kit Contents



Tools Required



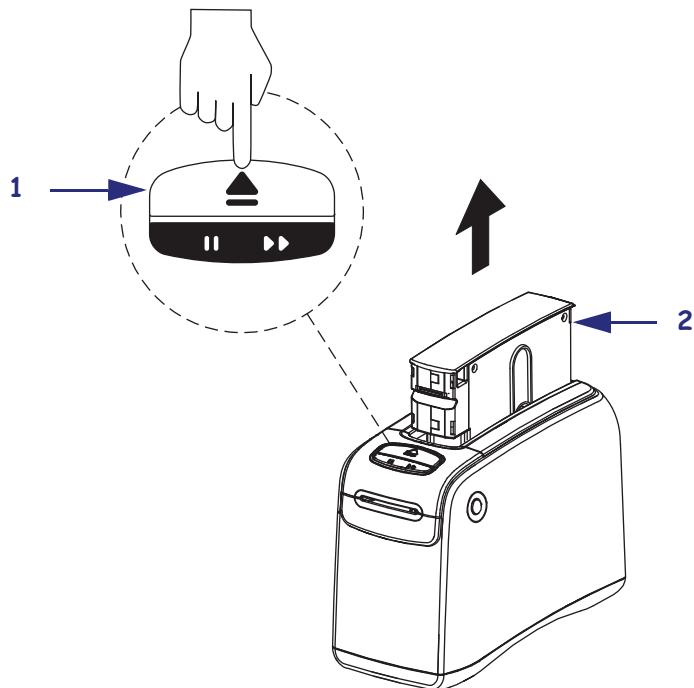
Tools • You need these tools to complete this procedure:

<input type="checkbox"/> Phillips Screwdriver Set	<input type="checkbox"/> Metric Nutdriver Set
<input type="checkbox"/> Antistatic Wriststrap and Mat	

Remove the Media Cartridge

1. See [Figure 46](#). Press Eject and remove the media cartridge.

Figure 46 • Media Cartridge, Eject Button, and HC100



1	Eject button
2	Media cartridge

2. Did the cartridge eject?

If...	Then...
Yes	<ol style="list-style-type: none"> Remove the media cartridge and set aside. Go to Open the Printer on page 80.
No	<ol style="list-style-type: none"> Turn off (O) the power switch. Turn on (I) the power and wait for the printer to power up completely. Press Eject. Continue with step 3.

3. Did the cartridge eject this time?

If...	Then...
Yes	<ul style="list-style-type: none">a. Remove the media cartridge and set aside.b. Go to Open the Printer on page 80
No	<ul style="list-style-type: none">a. Turn off (O) the power switch.b. Turn on (I) the power and wait for the printer to power up completely.c. Press and hold Eject for six seconds.d. Release Eject.e. If the cartridge ejected, go to Open the Printer on page 80.f. If the cartridge did not eject, continue with step 4.

4. Contact Technical Support. See [Contacts](#) on page 9.

Open the Printer



Caution • A qualified service technician must perform this installation.



1. **Caution** • Observe proper electrostatic safety precautions when handling static-sensitive components such as circuit boards and printheads.

Connect yourself to an antistatic device.

2. Place the printer on the antistatic mat.

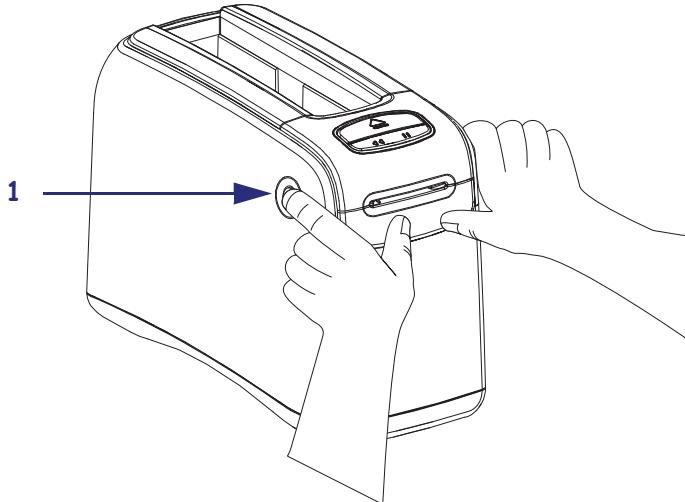


3. **Caution** • Turn off (O) the printer and disconnect it from the power source before performing the following procedure.

Turn off (O) the printer and disconnect the DC power cord and all data cables.

4. See [Figure 47](#). Press the upper cover release buttons located on both sides of the printer.

Figure 47 • Opening the HC100



1 Upper cover release button (one on each side)